

**NARCOTICS INTERDICTION:
Customs Management Action Needed To
Ensure Benefits Of Non-Intrusive Inspection
Technology Are Fully Realized**

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The Department of the Treasury

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Abbreviations

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ATD	Applied Technology Division
CDK	Contraband Detection Kit
Customs	United States Customs Service
CF	Customs Form
COBRA	Consolidated Omnibus Budget Reconciliation Act of 1985
FY	Fiscal Year
GPRA	Government Performance and Results Act of 1993
GSA	General Services Administration
MTXR	Mobile Truck X-Ray
NEEMR	National Enforcement Equipment Maintenance and Repair Program
NII	Non-Intrusive Inspection
OFO	Office of Field Operations
OIG	Office of Inspector General
OIT	Office of Information Technology
ONDCP	Office of National Drug Control Policy
PIMS	Property Information Management System
PPS	Personal Property Section
PRD	Personal Radiation Detector
RV	Recreational Vehicle
SEACATS	Seized Asset and Case Tracking System
SOP	Standard Operating Procedure
U.S.	United States
VACIS	Vehicle and Cargo Inspection System
XRIS	X-Ray Inspection System

*The Department of the Treasury
Office of Inspector General*

August 10, 2001

Mr. Charles W. Winwood
Acting Commissioner
U.S. Customs Service

In Fiscal Year (FY) 1999, the United States (U.S.) Customs Service (Customs) received a \$134 million appropriation to enhance its counterdrug operations by acquiring non-intrusive inspection (NII) technology. NII technology refers to a variety of advanced systems that permit Customs inspectors to inspect cargo and conveyances for the presence of narcotics or other contraband without physically opening or entering the shipment. The funding has enabled Customs to accelerate a 5-year technology acquisition plan that was developed for the Southern tier of the U.S.

Over the past few years, Customs purchased and deployed large NII equipment such as Mobile Truck X-Ray Units, Fixed-Site Truck X-Ray Systems, and Vehicle and Cargo Inspection Systems (VACIS), as well as smaller equipment such as Mobile X-Ray Vans, Busters, Personal Radiation Detectors (PRD), and Itemisers. As Customs deployed the equipment, expectations were high that this equipment would enhance Customs ability to reduce the supply of illicit drugs entering the country.

We conducted this audit to determine if Customs NII equipment, acquired for counterdrug and other enforcement activities, has been achieving expected benefits, effectively used, and properly accounted for and controlled. We conducted our work from November 1999 to October 2000 at Customs Headquarters in Washington, D.C., and at Customs ports in Boston, Massachusetts; JFK Airport, New York; Newark, New Jersey; Miami, Florida; Port Everglades, Florida; Laredo, Texas; Pharr/Hidalgo, Texas; Brownsville, Texas; Nogales, Arizona; and Detroit, Michigan. A more detailed description of our objective, scope and methodology is provided as Appendix 1.

Results in Brief

The use of NII equipment was expected to benefit Customs by improving the ratio of seizures to examinations, allowing less delays for legitimate conveyances and cargo, and reducing the amount of drugs entering the country. We were unable to determine if the use of this equipment has achieved these goals. Customs has not developed performance measures or otherwise evaluated the effectiveness of this equipment. Although Customs provided data that showed NII equipment had contributed to 170 narcotics seizures from October 1998 to June 2000, we found errors with this data that raised questions about its validity, and Customs could not determine whether or not these seizures would have been made without the equipment. Moreover, we found that Customs needs to do a better job in monitoring equipment utilization, and that the limited data available showed some pieces of equipment were underutilized.

In addition, we believe Customs needs to better account for this equipment. We found several instances in which the National Enforcement Equipment Maintenance and Repair equipment database (used for developing maintenance and repair budgets) did not reconcile with Customs official property listing, the Property Information Management System (PIMS). We found neither database to be accurate, due to a lack of internal controls, particularly in monitoring the movement of equipment from one location to another. We also found other property accountability weaknesses, including detachable pieces of equipment that were not separately accounted for in PIMS, and certain PIMS property codes that were confusing.

Further, we identified several other weaknesses that could negatively affect Customs ability to meet its NII equipment performance goals. For example, the deployment of large NII systems was not always adequately planned. Also, Customs inspectors did not always wear their assigned PRDs, devices useful in detecting radioactive materials, and unneeded equipment, funded by the Consolidated Omnibus Reconciliation Act of 1985, was not transferred to other locations where it could be effectively used, but instead was left idle.

We made several recommendations to improve the management of NII and other inspection equipment. The recommendations include: (1) establishing performance measurements; (2) collecting and analyzing NII utilization data; (3) taking various actions to improve property inventory controls;

(4) monitoring to ensure PRDs are being used; and (5) improving planning, and working better with the General Services Administration in addressing construction issues for large NII systems.

Customs concurred with our findings and recommendations and has agreed to implement corrective actions. Customs response to our draft report is provided in Appendix 3.

Background

Mission and High-Technology Equipment

One of the missions of Customs is to guard against illegal drugs entering the U.S. To enhance this effort and improve the quality of inspections, Customs has begun to increase its reliance on high-technology, NII equipment. These pieces of equipment permit Customs officials to inspect cargo and conveyances for the presence of narcotics, or other contraband, often without having to perform the costly, time-consuming process of unloading cargo or having to drill or dismantle conveyances. Customs believes this equipment allows inspection of areas that are difficult or not possible with conventional inspection, including inside tires and gas tanks of vehicles.

Customs considers NII technology to include only the newer and larger pieces of equipment, such as Mobile Truck X-Rays (see Figure 1), rail systems, VACIS, and Fixed-Site Truck X-Rays. Smaller pieces of non-intrusive equipment, including Busters, fiberscopes, PRDs, and even mobile x-ray vans, fall outside of Customs NII definition. Customs refers to these other pieces as "inspection equipment." However, in this audit, we included all equipment large and small under the umbrella of "NII equipment." (Appendix 2 provides a brief description of various pieces of NII equipment).

Acquisition Plan/Funding

The increased emphasis on NII equipment can be traced to early 1998 with the development of the *U.S. Customs Service Five-Year Technology Acquisition Plan for the Southern Tier*. This plan and subsequent iterations focus on large pieces of equipment such as truck, rail, sea container, vehicle and mobile x-ray systems for use at Southern border ports from California to Puerto Rico.

Major NII funding began in FY 1999 when Customs received \$134 million¹ enabling the bureau to accelerate the 5-year technology acquisition plan. Contingent on additional congressional funding, the plan includes a 5-year deployment schedule, with the highest risk ports receiving equipment as funds and the production of new technology become available. The plan was updated in July 1999, and again in April 2001. As funding became available, Customs purchased more and more NII equipment. Currently, over 50 large NII systems are in operation nationwide (up from 14 at the end of FY 1999) with an additional 51 large systems funded and scheduled for delivery by the end of FY 2002. Customs officials estimate that completion of the acquisition plan will require an additional \$70-80 million.

Figure 1: Mobile Truck X-Ray



Source: OIG

Development/Acquisition/Maintenance

Much of the NII technology used by Customs flows from military initiatives. The Office of National Drug Control Policy (ONDCP) works with the Department of Defense and Customs in developing and testing NII technologies. Customs funds a Department of Defense, NII technology

¹ This amount funded only the large pieces of NII equipment and does not include research and development, repair and maintenance, and salary costs.

testing and evaluation facility at Fort Huachuca, Arizona, a military base that also provides field installation support.

The decision to procure a given NII system is made jointly by the Customs Office of Information and Technology (OIT) and the Office of Field Operations (OFO), based on the outcome of developmental, technical, and operational evaluations. The Anti-Smuggling Division, OFO, makes a preliminary determination of the numbers and types of systems (e.g., systems to examine trucks, pallets, etc.) needed at Customs locations based on smuggling threats, traffic analyses, and other factors. The Applied Technology Division (ATD), OIT,² then performs detailed site surveys to determine which system may feasibly be placed at a given port. The outcomes of these surveys are provided to OFO for a final determination. Once NII equipment is procured, the ATF's National Enforcement Equipment Maintenance and Repair (NEEMR) program staff, based in Woodbridge, Virginia, are responsible for equipment maintenance. Repairs are typically performed by NEEMR technicians, contract field service technicians around the country, or by appropriate vendors.

In addition to systems already in place, Customs is currently developing and/or testing several new pieces of equipment. These include a Mobile Truck X-Ray- Low Undercarriage View; Sea Container X-Ray; and Gamma Ray Pallet System.

Rail VACIS

Customs data shows that in FY 2000 over 570,000 railroad cars entered the U.S. along the Mexican border, but only a small number of these cars were inspected. Threat assessments indicate rail is a high-risk area. To address this threat, Customs plans to install a Rail VACIS at each of nine Southern border rail crossings. The cost of the system components is approximately \$2 million each. However, there are substantial costs for site preparation and construction, potential lease payments to landowners, and other costs that will vary by location. ATD estimates these costs to be \$500,000 per site, but the final costs will remain unknown until detailed site surveys are completed and construction contracts are awarded.

² ATD supports all elements of the Customs enforcement and facilitation processes through the technical implementation of operational requirements and when applicable, the development, acquisition, testing, evaluation, and logistics support of new technology. Within ATD are the following branches: Program Support; Research, Development & Evaluation; Systems Acquisition; and Technology Support.

Findings and Recommendations

Finding 1 **Customs Has Not Measured The Effectiveness Of Non-Intrusive Inspection Equipment And Some Equipment Was Underutilized**

NII equipment was expected to benefit Customs by improving the ratio of narcotic seizures to examinations, allowing less delays for legitimate conveyances and cargo, and reducing the amount of illegal drugs entering the country. In particular, Customs believes the equipment will improve the quality of inspections and allow inspectors to examine areas that are difficult or impossible to view using conventional means. We were unable to determine whether this equipment has achieved the goals Customs established. Customs has not developed performance measures or otherwise evaluated the effectiveness of this expensive high technology equipment. Customs did provide seizure data showing NII equipment contributed to 170 narcotics seizures between October 1998 and June 2000. However, this data had errors raising questions about its validity. In addition, Customs indicated it would have been difficult to determine whether the seizures only occurred because of equipment use, or whether the seizures would have occurred anyway.

Nevertheless, (with or without performance measures or cost benefit analyses) it is reasonable to expect that, in order to maximize effectiveness, the equipment should be extensively utilized. We found, however, that Customs has not gathered or analyzed sufficient data to determine equipment utilization. In the absence of a large Customs equipment utilization database, we analyzed available utilization data and spoke with port personnel. We found that many pieces of equipment were not being fully utilized due to maintenance problems, insufficient staffing, inspectors choosing not to use the equipment, and overall lack of Customs management oversight.

To Customs' credit they have taken several positive actions to address the need for performance measures such as (1) conducting a preliminary cost-benefit analysis of Fixed-Site Truck X-Rays, and (2) beginning to collect utilization data for all pieces of large NII equipment. We commend Customs for these actions but more is needed. At present, the combination of a lack of performance measures and underutilization of equipment places Customs at risk of not achieving its narcotic interdiction goals and could

place Customs in a tenuous position in justifying future purchases of equipment.

Also, in the case of measuring performance, we caution Customs that the existing seizure database may not be accurate and that factors other than total seizures need to be weighed in any analysis. Further in developing performance measures or conducting cost-benefit analyses, we believe that it is important to ensure that maintenance and repair costs are considered.

NII Equipment Expected To Provide Many Benefits

Customs purchased NII equipment to assist in meeting its strategic goal³ of reducing the amount of illegal drugs entering the U.S. As stated in the July 1999 edition of the *U.S. Customs Service Five-Year Technology Acquisition Plan For the Southern Tier*, Customs expected that the equipment would provide other benefits such as:

- improvements in the ratio of seizures to examinations;
- increases in numbers of seizures and arrests by Customs and other agencies;
- less delays for legitimate conveyances and cargo; and
- changes in smuggling modes and methods.

Also, it was expected that the NII equipment would assist Customs outbound enforcement efforts in interdicting undeclared currency, the majority of which is derived from proceeds involving narcotics trafficking.

While Customs expected NII equipment to upgrade its inspection capabilities, it is important to note that, as with any technology, NII equipment has limitations. For example, at one of the ports we visited during our audit, we reviewed a VACIS logbook and found that for roughly 55 percent of the x-rays performed, the inspector could not see through the containers. This, however is not necessarily a negative, because the

³ This goal was established to comply with the Government Performance and Results Act of 1993 (GPRA). GPRA requires federal agencies to establish performance goals and measures and to report annually on the degree to which the goals were met. The Customs performance measures relative to this strategic goal are (1) pounds of narcotics seized , and (2) number of seizures. These goals and measures are for **all** Customs narcotics seizures, some of which would occur from using NII equipment.

VACIS was intended to detect anomalies in the conveyance itself (e.g., fuel tank, tires, or frame) and not necessarily the cargo. We point out this limitation only to demonstrate that NII equipment is not infallible.

Customs Needs To Evaluate NII Equipment

The importance of narcotics interdiction and the high cost of future NII equipment purchases necessitate Customs being able to measure NII equipment performance. Customs simply needs to know the degree that the existing equipment is effective and whether additional purchases make sense. We found, however, that Customs has not developed performance measures or otherwise evaluated NII equipment performance against the strategic goal (reducing illegal drugs) or any of the expected benefits noted above.

Customs agreed that performance measures are needed for the NII equipment and told us that they are working to develop data definitions, reporting processes, and collection tools in order to build a database and to see what data elements could best be used as performance measures. As a rough first step in this process, Customs has performed a preliminary cost-benefit analysis on the Fixed-Site Truck X-Rays, and, for all the large NII equipment, has begun collecting utilization data (see pages 15-17 below for utilization data on the Fixed-Site Truck X-Rays). We think this is commendable. However, to the extent that seizure data is incorporated into any measurement system, we caution Customs that (1) the existing seizure database has reliability issues that need to be addressed, and (2) the use of seizure data as the only performance measure is subject to some risk. Also, in developing performance measures or conducting cost-benefit analyses, we believe that it is important to ensure that maintenance and repair costs are factored.

Data Reliability Issues Need To Be Addressed

Presently, Customs ATD collects NII-related seizure data from three primary sources:

- commercial cargo seizure reports inputted by port inspectors into the Customs Seized Asset and Case Tracking System database;
- daily seizure reports issued by OFO via electronic mail and;
- various monthly reports received from the ports.

The July 1999 edition of the *Five-Year Technology Acquisition Plan for the Southern Tier* states that the use of NII equipment should result in improvement in the ratio of seizures to examinations:

- increase in numbers of seizures and arrests by Customs and other agencies;
- less delay for legitimate conveyances and cargo; and
- changes in smuggling modes and methods.

At our request, Customs provided us with seizure statistics from the ATD database for the period of October 1998 to June 2000. This data showed that NII equipment contributed to 170 narcotics seizures weighing 152,525 pounds. In order to test the accuracy of this database, we reviewed Customs press releases to see if they matched the data. Several did not. Customs later confirmed the accuracy of the press release information. For example, the ATD database did not include a September 1999, 1,389-pound marijuana seizure involving the use of a laser range finder. Also, an 80-pound cocaine seizure from using a full cargo x-ray unit was correctly reported in a press release, but incorrectly entered into the database as a marijuana seizure.

In addition, we obtained a seizure listing from the Laredo, Texas, Port of Entry for the period February 20, 1999 to March 4, 2000, and matched that list to the ATD statistics. We found only 4 of 13 seizures on the Laredo listing were in the ATD database. Among the seizures not listed in the ATD database were three marijuana seizures with a combined weight of over 850 pounds.

In our opinion, these examples raise questions as to the validity of the database, and point to the need for Customs to institute some method of quality control to ensure an accurate database.

Limitations Of Seizure Data

As Customs wrestles with the difficult problem of implementing a methodology to measure the effectiveness of NII equipment, we think it is important to point out that the use of seizure data as the sole indicator is subject to some risk. Inherent difficulties exist in measuring the performance of any piece of equipment. This is especially true for equipment used to detect narcotics. For example, outcome measures such as the number of, and volume of, seizures may not necessarily be a good

indicator. An increase in seizures could indicate effectiveness, but also may only reflect the fact that more drugs are entering the country. Further, the use of NII equipment is part of an integrated effort by Customs to interdict narcotics and it may be difficult to attribute any given seizure to the use of the equipment. For example, was the seizure due to the equipment? the use of a canine? good inspector judgment? sound intelligence information? or a combination of the above elements? If so, what percentage of any given seizure could be attributed to the equipment? We believe that these questions are important and Customs should consider them in developing performance measures for NII equipment.

Maintenance and Repair Costs.

In implementing performance measures and/or performing cost-benefit analyses, maintenance and repair costs need to be considered. Several years ago, the funding for enforcement equipment maintenance and repair was left to the discretion of the equipment user or an Assistant Commissioner. In 1994, Customs officials recognized that high technology equipment, used in the support of inspection, investigation, and interdiction activities, needed to be better managed, and required regular maintenance to ensure it was operating properly, and to avoid expensive and time consuming repairs. As a result, NEEMR was established for the purpose of having consistent application of quality maintenance and repair service agency-wide, and to optimize the availability of equipment and take advantage of economies of scale. In FY 2000, NEEMR maintenance costs were approximately \$11.3 million. The use of maintenance and repair costs as an evaluation factor would assist Customs in not only assessing equipment performance but also NEEMR's performance.

The Importance Of Utilizing NII Equipment

In the meantime, as Customs moves towards development of performance measures, one would expect that NII equipment be fully utilized. In fact, Customs recognized the importance of utilizing this equipment as evidenced by a November 1999 agreement⁴ with the National Treasury Employees Union. Relative to the assignment of inspectors to large NII equipment, the agreement states that "...minimum staffing levels must be maintained during all operational hours of the port and the systems must be continually

⁴ National NII Technology Assignments, Implementation & Operational Procedures Plan, November 1999.

in use, pending traffic volume, during all port operational hours." The agreement further states that "...management and primary teams will ensure that the system operates continuously during port hours of operation." As detailed below, we found that Customs lacks data on equipment utilization, but based on our analysis it appears that many pieces of equipment are underutilized.

More Equipment Utilization Data Is Needed

Customs has established the following three principal systems to collect utilization and maintenance data from the ports.

- Fixed-Site Truck X-Ray - A variety of data is recorded on a daily basis, including the number of vehicles x-rayed, hours the system was down, and hours the system was available. The data is forwarded to officials in Customs ATD, where monthly utilization indice reports are produced for further analysis.
- VACIS - A quarterly, standardized maintenance log is prepared by VACIS site personnel and faxed on a weekly basis to NEEMR for analysis of systems failures. Some of the categories on the log are: time up; non-system downtime; a description involving "incidents"; and corrective action taken. We were advised that NEEMR personnel review this data to identify consistent and persistent problems that may be recurring to see if there are specific problems with the equipment.
- X-Ray System Monthly Report - This report is used for NII equipment such as the Mobile X-Ray Vans, pallet x-rays, and the x-ray systems located at the airports. The report is supposed to be faxed on a monthly basis to NEEMR. Five major data categories appear on this report: control unit meter readings; general use of system; enforcement results; seizure numbers; and comments. The number of hours that the system is actually x-raying items are included in the report.

We attempted to analyze data from the above sources to determine if NII equipment were being optimally utilized. However, we found the systems to be lacking because Customs has not fully developed these databases. For example, when we began our audit, an approximate 2-year backlog of X-Ray System Monthly Reports had not been entered into the NEEMR database. In the case of the VACIS, Customs could not provide us

with any analysis of data received from the field. The best equipment utilization data available was a Headquarters' analysis of Fixed-Site Truck X-Ray systems (see below, pages 15-17).

Some Pieces Of NII Equipment Are Not Fully Utilized

In attempting to evaluate NII equipment utilization, we reviewed a Customs Fixed-Site Truck X-Ray study, and spoke with Headquarters and port personnel at the locations we visited. We also reviewed local data, where available. As detailed below, we found that Fixed-Site Truck X-Rays appeared to be marginally underutilized and Mobile X-Ray Vans were underutilized to a much greater extent. Although the data is somewhat limited, we believe these systems were not optimally utilized due to maintenance problems, insufficient staffing, inspectors choosing not to use the equipment, and lack of Customs management oversight. These causes raise numerous potential issues such as contractor performance, adequacy of maintenance contracts, location of staff and equipment, acceptability of the equipment by the staff, and even the adequacy of the equipment itself. However, the volume of documentation and available data is insufficient to draw any definitive conclusions related to these potential problems.

Fixed-Site Truck X-Ray Data At Seven Ports

Customs analyzed Fixed-Site Truck X-Ray data of seven Southern ports. For five of the ports, the data was analyzed for the period October 1998 to May 2000; for one port the period covered was May 1999 to May 2000; and for the other, the data was analyzed for the period July 1999 to May 2000.

1. Otay Mesa, California,
2. Calexico, California,
3. Nogales, Arizona,
4. Pharr, Texas,
5. Ysleta, Texas,
6. El Paso Texas, and
7. Laredo, Texas

For these ports, Customs captured monthly data on the total number of hours the cargo operations area was open; the actual number of hours the truck x-ray operated during the cargo operations time; and the number of

truck x-ray examinations performed. Customs expected the Fixed-Site Truck X-Ray to perform six examinations for every hour that the cargo facility was operational. Customs, however, believed a rate of 85 percent of that standard would be acceptable, allowing for maintenance and repairs.

The results of this study, however, showed that the utilization rate fell below the 85 percent standard. Although several of the ports, on some of the months, met the 85 percent standard; for the total duration of the study, only Otay Mesa achieved an 85 percent utilization rate. The combined monthly averages for all ports ranged from a low of 61 percent (January 1999 and April 2000) to a high of 79 percent (October 1999). Table 1 depicts the overall results for each of the seven ports.

Table 1: Fixed-Site Truck X-Ray Utilization

Port	Actual Exams	Number of Exams if 100% Utilized	Actual Utilization Rate
Otay Mesa	41,247	47,630	86.6%
Nogales	15,517	19,932	77.9%
Laredo	19,922	25,673	77.6%
Calexico	28,280	37,782	74.9%
Ysleta	31,855	42,919	74.2%
El Paso	22,416	33,106	67.7%
Pharr	13,654	49,104	27.8%
Total	172,891	256,146	67.5%

Based on our review of Customs' back-up data and conversations with some port personnel, it appears that the primary causes for underutilization were equipment failure, and at times, lack of staffing. In the case of Pharr, (utilization rate of 27.8 percent) the back-up data clearly shows these

causes apply. Information gleaned from the Pharr back-up data shows the following:

- March 1999-The system closed 7 days due to operational problems; on 10 other days the equipment was down 1 to 4 hours due to repair problems.
- June 1999-The system closed 10 days for contractor work or operational problems.
- July 1999-The system closed 2 days due to lack of personnel, and on 2 other days the system was non-operational ranging from 5 to 8 hours each, due to operational problems.
- November 1999-The system was not in operation for 9 days due to lack of personnel, and on several other days was non operational due to repairs.
- January 2000-The system was non-operational 11 days due to repairs and a lack of personnel.

Mobile X-Ray Vans

As noted above, Mobile X-Ray Van data sent to headquarters from the ports was greatly backlogged. Therefore, in attempting to gauge utilization, we reviewed reports at the ports we visited and spoke with port officials about this matter. We found that, generally, Mobile X-Ray Vans were greatly underutilized. For example, at the Port of Detroit, utilization records showed significant downtime for two vans. For the 10-month period of February 1, 1999, to November 30, 1999, the van assigned to the airport operated an average of 23 hours per month, while the cargo area x-ray van averaged 56 hours per month. According to port inspectors, the x-ray truck was not used more due to equipment malfunctions.

At Miami, during the 13-month period of October 1, 1998, to October 31, 1999, the Mobile X-Ray Van at the airport was used an average of only 14 hours per month. As in the case of Detroit, according to Customs personnel, the lack of usage was primarily due to malfunctioning equipment. At Nogales, however, underutilization appeared to be due to inspectors preferring not to use the equipment. To illustrate, during the 6-month period of May through October 1999, the van was operated (was turned on) an average of 193 hours per month; however, it was used to perform x-rays an average of only 2.3 hours per month (4.6 minutes per day).

Recommendations

1. The Commissioner of Customs should ensure that the effectiveness of non-intrusive inspection equipment is measured.

Management Comment. Customs concurred and is developing an automated data collection system to replace the existing manual one. The system, once completed, will result in Customs having real-time data on throughput, enforcement results, maintenance and repairs, and utilization.

OIG Comment. We consider this recommendation to have a satisfactory management decision. However, final action is pending because Customs has not completed development of an automated system.

2. The Commissioner of Customs should ensure that quality controls are established so that seizure data is accurate.

Management Comment. Customs concurred and will periodically compare the NII database records with the Seized Asset and Case Tracking System (SEACATS).

OIG Comment. We consider this recommendation to have a satisfactory management decision with final action completed.

3. The Commissioner of Customs should ensure that Customs better collects and analyzes non-intrusive inspection utilization data and, based on this analysis, takes action to ensure that the equipment is optimally utilized.

Management Comment. Customs concurred. Corrective actions include the issuance of a memorandum clarifying Customs expectations on the effective utilization of deployed NII equipment. Customs will also issue a revised data collection form to improve the manual collection of data pending completion of the automated system discussed above in Recommendation 1.

OIG Comment. We consider this recommendation to have a satisfactory management decision with final action completed when Custom begins using its new data collection form.

Finding 2

Property Controls Over NII Equipment Were Not Effective

We found several instances where NEEMR's equipment database, used for developing maintenance and repair budgets, did not reconcile with PIMS, Customs official property database. We found that neither database was accurate. There were instances where equipment was listed in the NEEMR database but not in PIMS, even though the equipment was physically located at the port and therefore should have been in PIMS. Conversely, items located at the ports were correctly listed in PIMS but not in the NEEMR database. This occurred due to a lack of internal controls, particularly in monitoring the movement of equipment to the ports. Once we brought this to Customs attention, Customs took appropriate corrective action.

We also found two other internal control weaknesses. First, individual pieces of equipment, such as Laser Range Finders and Busters, are sometimes included as part of a larger piece of equipment, such as a Contraband Detection Kit. These smaller pieces, which can be detached and used independently, were not bar-coded and recorded separately in PIMS. Second, some of the property codes used were confusing and inconsistent. Customs has taken corrective action to address the confusing property codes but has not acted to address the detachable equipment issue. In order to protect its investment in NII equipment, Customs needs to bar code the detachable equipment and monitor the use of this equipment to ensure that its newly established controls are effective.

Customs Property Information Management System And NEEMR Equipment Database

As is the case with all other Customs property, NII equipment is accounted for in PIMS. However, NEEMR also maintains its own NII equipment database, which is used for purposes such as developing a maintenance and repair budget. Typically, NII equipment is accounted for in one of two ways based on its value:

1. For equipment valued at less than \$5,000, NEEMR inspects and tests the equipment, and attaches bar codes and sends instructions with the equipment to the port. NEEMR also sends a Customs Form (CF) 33, *Property Transfer Action*. The port is responsible for creating a property record in PIMS, and is supposed

to sign the CF 33 and return the form to NEEMR. The signed CF 33 signifies to NEEMR that the equipment was delivered.

2. For equipment exceeding \$5,000 in value, Customs Personal Property Section (PPS), National Logistics Center, in Indianapolis, creates a temporary PIMS record. These are normally large pieces of equipment sent directly to the ports. NEEMR will be onsite for the deployment of these large systems. After delivery, the port creates a permanent PIMS record.

When we started our audit, NEEMR did not have the capability to add, delete, or change a PIMS record. NEEMR was able to query only. During our audit, this changed.

Three Reviews Performed

In an effort to determine the adequacy of controls over NII equipment, at each port we visited, we performed three separate reviews:

1. We attempted to reconcile NEEMR's NII property listing with the "official" property list contained in PIMS, including conducting detailed conversations with the port's Local Property Officer. We also reviewed various property files at each port.
2. We reviewed CF 52s, *Report of Property For Survey*, from FY1998 up until the time of our visit. These forms are completed for personal property items that are stolen, missing, damaged, or destroyed through other than normal wear and tear. We also obtained a listing of all NII equipment "written off" via the Board of Survey process for **all** ports.
3. We reviewed CF 259s, *Personal Clothing and Equipment Record*. CF 259s are completed whenever personal property is assigned to Customs employees.

Our NEEMR/PIMS Reconciliation Showed Discrepancies And The Need For Better Controls.

We found several instances where equipment was listed in the NEEMR database but not in PIMS, even though the equipment was physically located at the port. Conversely, we found items located at the ports and on the PIMS listing but not in NEEMR's database. Also, we found equipment was lost due, in part, to inadequate controls, including NEEMR not following

up on missing CF 33s. Further, although we found no related lost equipment, individual pieces of equipment, which were part of a larger piece of equipment but could be detached and used separately, were not recorded separately in PIMS. Finally, we found that property codes used for various pieces of equipment were confusing. The following are some examples of property control problems identified during our field visits.

Lost Equipment Cause Unknown

On August 2, 1999, in responding to an OFO technology survey, the port of Miami could not locate 14 PRDs, 1 Buster, and 1 Laser Range Finder. We estimate the acquisition value of this equipment to be about \$25,000.

Equipment Valued At Less Than \$5,000 Per Item Lost Or Not Entered Into PIMS Due To Lack Of NEEMR Monitoring.

Twenty PRDs, listed in NEEMR's database but not in PIMS, were shipped to the port of Laredo by NEEMR, via FedEx, in March 1999. The port had no record of receiving them, and NEEMR could not locate for us the signed CF 33 acknowledging receipt by the port. In this case, about \$27,000 in equipment was lost or stolen because NEEMR did not monitor this shipment. First, NEEMR didn't review PIMS to see if equipment records were created by the port, and second NEEMR did not monitor or inquire into the whereabouts of the missing CF 33.

A similar situation showing the lack of NEEMR monitoring occurred in March 2000, when a Buster shipped to Brownsville, Texas, was lost. The equipment was never entered into PIMS, we could not locate the equipment at the port, and NEEMR could not provide us a copy of the signed CF 33 documenting that the port received the equipment.

We also found a case in which 50 PRDs, valued at about \$65,000, were sent to Newark, New Jersey, and received by the port, but not entered into PIMS. In this case, the port failed to enter the records and NEEMR never knew it because NEEMR failed to monitor the CF 33s. After we brought this to Customs attention, the port entered the records into PIMS.

Equipment Exceeding \$5,000 Not Entered Into PIMS

The prior examples were related to equipment purchases of less than \$5,000. We also found problems in accountability of high-dollar pieces of equipment, the responsibility for which is shared by the PPS in Indianapolis

and the individual ports. In Newark, a VACIS (roughly \$1 million) was not listed in PIMS, even though the equipment was operating at the port. Similarly, in Miami a Mobile X-Ray Van was not listed in PIMS, as was an x-ray system at the JFK mail facility in New York. An apparent reason for these pieces of equipment not being listed in PIMS were delays by the PPS staff in Indianapolis in entering the equipment into the system.

Detachable Units Were Not Accounted For In PIMS And Property Codes Were Confusing

We also found accountability weaknesses related to (1) detachable pieces of equipment and (2) property codes used for various pieces of equipment. For example, Fiber Optic Scopes and Laser Range Finders, when purchased separately, were bar-coded and inventoried in PIMS. However, radiation detectors that accompanied X-Ray Vans or Pallet X-Ray Units, were not separately accounted for in PIMS, nor were Fiber Optic Scopes or Laser Range Finders that were included in Contraband Detection Kits. We believe that this represents an equipment control weakness and that detachable radiation detectors, Fiber Optic Scopes, and Laser Range Finders should be separately accounted for in PIMS.

Also, many property codes in PIMS were confusing. A six-digit "property code" was used to categorize specific types of equipment. For example, property code ----- represented "x-ray/density testing equipment." One type of equipment, such as a Buster, could be found under different property codes, i.e., ----- and ----- . This also creates difficulties when conducting a property inventory. For example, in order to determine how many Busters are physically located at a given port, the local property officer has to review the entire property printout and may find the Busters are listed in several places under three or four different property codes.

Corrective Actions Taken By Customs

When we brought the above deficiencies to Customs attention, officials acknowledged the weaknesses in NII property controls, and stated that a lack of communication between all parties contributed to the problem. To their credit, they also took action to address most of the deficiencies. First, for NII equipment costing less than \$5,000, NEEMR has dedicated one staff person to process and transfer property. Second, NEEMR has now gained the ability to enter into PIMS equipment costing less than \$5,000. Third, NEEMR also has implemented a refined process in which a

Logistics Technician tracks the CF 33s sent out with the equipment and follows-up with phone calls when an unusually long time transpires before receiving the form back from the port. In the case of equipment exceeding \$5,000, PPS will better monitor the process. For the confusing property codes, Customs told us that all Busters, Itemisers, and PRDs incorrectly coded will be recoded. Customs, however, has not addressed the need to bar-code and account for radiation detectors, Fiber Optic Scopes, and Laser Range Finders that are part of larger x-ray units or contained in Contraband Detection Kits.

Our Board Of Survey Review Showed The Need For Better Controls Over Busters

According to Customs records, 18 Busters nationwide, costing about \$83,000, have been lost, stolen, or were missing, and therefore "written off" via the Board of Survey Process. In addition, our work disclosed three additional Busters that were lost and should have gone through the Board of Survey process (total cost about \$15,000). Although we are uncertain of the cause of these losses, it appears that controls were lax. For example, in a memorandum dated July 12, 1999, the Chief of the Technology Support Branch wrote that a utilization log should be maintained, and that Busters should always be signed in and out when they are taken from a secure area. During our field visits, we did not see evidence that log books were maintained at all ports.

We believe a need exists to tighten controls over Busters. In addition to being a valuable enforcement tool, Busters are relatively costly (roughly \$5,000 a piece), contain radioactive material, and are about the size of a brick, and therefore easy to lose.

Our Review Of Personal Clothing And Equipment Records Showed The Need For Better Controls Over PRDs

We found the need to better control PRDs. CF 259, *Personal Clothing and Equipment Record*, is used to document the assignment of Customs property to a specific individual. A CF 259 is supposed to be completed and signed by the custodian whenever property is assigned. During our field visits, we reviewed the ports' CF 259s to determine if PRDs issued to inspectors were recorded and signed for. We found the following:

- At one port, 92 out of 113 PRDs were not signed for until 2 months after they had physically been issued to inspectors.

-
- At another port, the local property officer's initials were not affixed on 20 CF 259s, as required, when the PRDs were issued to inspectors.
 - We saw CF 259 records with dates indicating NII equipment had been received by inspectors before the equipment was actually acquired by the port.

Recommendations

1. The Commissioner of Customs should ensure that detachable radiation detectors, Fiber Optic Scopes, and Laser Range Finders are accounted for separately in the Property Information Management System.

Management Comment. Customs has implemented this recommendation.

OIG Comment. We consider this recommendation to have a satisfactory management decision with final action completed.

2. While NEEMR has taken action to correct certain deficiencies, the Commissioner of Customs should emphasize to all Customs employees the need to adhere to prescribed Property Information Management System property procedures.

Management Comment. Customs concurred and has taken a number of steps to upgrade property controls. Customs has implemented new procedures. For example, detachable units are now recorded separately, PRDs are recorded by ATD and then sent to the field, and equipment exceeding \$5,000 is recorded when the obligating document is received versus physical receipt. Customs also commented that the OIG was incorrect in stating that certain equipment was not recorded in PIMS but operating at the ports.

OIG Comment. We consider this recommendation to have a satisfactory management decision with final action completed. We acknowledge that we incorrectly reported some equipment as not being listed in PIMS, and have made the appropriate corrections in this final report.

-
3. The Commissioner of Customs should issue a notice emphasizing the need and importance of accounting for Busters on a routine basis and should require the use of Buster logbooks.

Management Comment. Customs concurred and will address this matter in a new *Personal Property Management Handbook* that will be distributed by September 30, 2001.

OIG Comment. We consider this recommendation to have a satisfactory management decision with a projected final action date of September 30, 2001.

4. The Commissioner of Customs should issue a notice emphasizing the need to ensure that CF 259s for Personal Radiation Detectors are properly maintained.

Management Comment. Customs concurred and will address the use of CF259s for Personal Radiation Detectors in the new *Personal Property Management Handbook* to be issued by September 30, 2001.

OIG Comment. We consider this recommendation to have a satisfactory management decision with a projected final action date of September 30, 2001.

5. The Commissioner of Customs should ensure through the use of self-inspections, or some other form of monitoring, that controls over non-intrusive inspection equipment are being followed.

Management Comment. Customs concurred and will amend the *Personal-Property Self-Inspection Worksheet* to specifically address NII equipment. In addition, the Fleet and Property Management Branch will recommend to the Management and Inspection Division that NII equipment be included in its reviews.

OIG Comment. We consider this recommendation to have a satisfactory management decision with final action pending revision of the self-inspection worksheet and reviews conducted by the Management and Inspection Division.

Finding 3

Logistical Planning For The Deployment Of Some Large NII Systems Has Not Always Been Adequate

The immediate and effective utilization of several expensive large NII systems has been somewhat hampered by insufficient logistical planning. Specifically, Customs encountered many problems in the deployment of VACIS and Fixed-Site Truck X-Ray equipment which led to maintenance difficulties, downtime, and security risks at some ports. Some of the problems apparently occurred due to the General Services Administration (GSA)⁵ not coordinating with Customs, and in other cases it appears that Customs rushed to get the equipment operational at the expense of planning. Some of the planning problems we found included:

- at Brownsville, Texas, significant delays were experienced in the installation of a Fixed-Site Truck X-Ray;
- a truck chassis snagged the above ground cables (cable should have been underground) disabling the VACIS at Laredo, Texas;
- a Fixed-Site Truck X-Ray, at Pharr, Texas, was so exposed to unfavorable weather conditions that Customs had to resort to stuffing artificial Christmas tree branches in fencing to block dirt, sand, and the wind from hampering equipment operation; and
- at some ports, the VACIS and Fixed-Site Truck X-Ray equipment were deployed some distance away and out of sight of the "directing" inspector, posing a risk that vehicles will not report for inspection.

Delays In Getting A Fixed-Site Truck X-Ray Operational At Brownsville, Texas

At the Port of Brownsville, Texas-Los Tomatoes, a significant delay occurred with the installation of a Fixed-Site Truck X-Ray system, apparently due to GSA not coordinating with Customs. The system had been installed approximately 9 months prior to our visit and was not operational due to 37 facility discrepancies (GSA was responsible for 34 of these and the vendor for the other 3) that included a poorly constructed truck exit ramp. Of interest is the fact that six Fixed-Site Truck X-Ray

⁵ As builder and landlord for the Civilian Federal Government, the GSA is responsible for certain construction projects at Customs ports.

systems had already been installed and tested at other ports prior to the Brownsville production.

To illustrate the problem with the exit ramp, pictured below is (1) a typical Fixed-Site Truck X-Ray provided to us by Customs, and (2) a photograph, taken by us at Brownsville, showing the exit ramp where trucks disengage from the pulley. (See Appendix 2 for a description of the Fixed-Site Truck X-Ray.)

In the case of the ramp at Brownsville, due to the natural contour of the earth, it was believed that "Low Boy" trucks (used to carry heavy equipment with the bed being close to the ground), comprising about 1 percent of the truck traffic at Brownsville, would scrape the ground when exiting the pulley. Therefore, it was decided that an exit ramp should be constructed. However, the inclining ramp with a height of more than two feet resulted in the truck drivers being on such a steep incline that they couldn't see the ramp. This of course created a danger that trucks could be driven off the side of the ramp and possibly overturn.

Figure 2: Typical Fixed-Site Truck X-Ray



Source: Customs

Figure 3: Fixed-Site Truck X-Ray Exit Ramp at Brownsville, Texas



Source: OIG

According to Customs, the problem with the Brownsville system as well as certain other Fixed-Site Truck X-Rays was caused by GSA not coordinating with Customs. According to Customs, the Fixed-Site Truck X-Ray had suffered from the beginning by a lack of a well-coordinated effort by GSA. The site at Calexico, CA, was to be the baseline for future Fixed-Site Truck X-Rays. However, when the Calexico plans were forwarded to GSA, they were often not used because GSA is divided into regions and the regional managers would use different engineering firms. These firms would add or subtract features, and many times the plans were not forwarded to the ATD project office or Indianapolis for approval prior to construction.

In addition, Customs stated that the GSA-appointed construction manager was chosen without any input from Customs, did not fully understand Customs requirements, and did not have Customs best interests in mind. The ATD project office would send personnel to construction sites to offer advice and point out deficiencies, but much of this advice was ignored. GSA would contract for both the construction manager and the construction company and effectively excluded the ATD project office from the process. In summary, according to Customs, the Brownsville project was an example where the GSA project managers assumed they knew what Customs needed and built the facility without Customs input.

Logistical Planning Problems

At several locations Customs encountered maintenance problems, downtime, and potential security or safety risks because VACIS and Fixed-Site Truck X-Ray equipment were deployed without sufficient logistical planning. Although it is difficult to determine the exact cause for the lack of planning, it appears that Customs rushed to get the equipment in place. Four cases are detailed below.

VACIS-Laredo

A VACIS was deployed at one of the bridges at Laredo, Texas. However, because there was no electricity close by, Customs had to power the unit from the accompanying Recreational Vehicle (RV) that houses the monitors and controls. This necessitated Customs periodically driving the RV to a gas station for refueling. Customs personnel provided a front and rear escort to and from the gas station, thereby tying up resources. To correct this problem, Customs ran electrical cables to the VACIS from the electrical source. These cables, however, were above ground and ran across a truck pathway, resulting in a truck chassis snagging the cables and disabling the VACIS. At the time of our visit to Laredo, workers were cutting concrete to bury the cables.

Fixed-Site Truck X-Ray-Pharr

The positioning of the Fixed-Site Truck X-Ray at Pharr, Texas, was constructed in a location exposed to the elements. In order to protect the Fixed-Site Truck X-Ray from wind-blown dust and sand, Customs constructed fencing extending out on both sides for about 25 feet and stuffed the fencing with artificial Christmas tree branches.

VACIS And Fixed-Site Truck X-Ray Equipment Out Of Line Of Sight Of Directing Inspector

We also observed at some locations that there were little or no controls to ensure that a truck, which had been directed by an inspector to drive through a VACIS or a Fixed-Site Truck X-Ray, did in fact proceed to the designated x-ray area. Often the "directing" inspector was located a good distance away, or was not in visual sight, of the x-ray system. Some Customs port officials acknowledged this is a problem and commented that part of the reasons were due to space limitations or poor logistical planning

when the systems were installed. Customs Headquarters officials commented that they are working to address this issue.

Recommendations

1. The Commissioner of Customs should direct Customs officials in Headquarters and Indianapolis to meet with the appropriate GSA officials to further discuss problems associated with the installation and deployment of large non-intrusive inspection systems, and develop solutions to prevent them from recurring.

Management Comment. Customs concurred and will schedule a meeting with GSA to discuss problems associated with installing and deploying NII equipment.

OIG Comment. We consider this recommendation to have a satisfactory management decision with final action completed when Custom meets with GSA.

2. The Commissioner of Customs should ensure that a formal planning process be adopted for the deployment and installation of the major non-intrusive inspection systems and that the process be monitored to ensure compliance.

Management Response. Customs concurred and will put in writing a formal planning process. Customs stated that it has been effective in planning the deployment of NII equipment, and that the OIG noted issues with only 3 of the 60 deployments.

OIG Comment. We consider this recommendation to have a satisfactory management decision with final action pending the completion of the planning document. We are unable to comment on the 60 deployments that Customs stated were successful, because we did not review these deployments.

3. The Commissioner of Customs should ensure that, at all ports with large non-intrusive inspection systems, a process is developed to ensure that all conveyances directed for examination by these systems, do in fact report for inspection.

Management Comment. Customs will analyze options for providing greater assurance that conveyances directed for examination do in fact

report for inspection. The analysis will consider pros and cons of the options including the limitations posed by the peculiarities of specific port locations.

OIG Comment. We consider this recommendation to have a satisfactory management decision with final action pending the completion of Customs analysis.

Finding 4

Personal Radiation Detectors Were Not Always Worn And Related Enforcement Data Was Not Being Collected

At various ports, we found that Inspectors did not always wear and use PRDs, as required by Customs policy. These devices, about the size of a pager, are intended to alert inspectors of the presence of radioactive materials that can be used for purposes such as terrorist attacks. We also found that, at the Port of Miami, 25 PRDs went unused for over a year and, at Nogales, only 9 of 40 PRDs were assigned because inspectors were concerned with false alarms. Further, Customs does not collect data on incidents in which PRDs detect radioactive materials. We believe that the danger associated with radioactive materials necessitates Customs ensuring that PRDs are worn and used by individuals performing inspectional duties. Also, Customs should collect data on PRD detections to assist in national security and enforcement efforts.

PRDs Are Required To Be Used

Customs has been tasked with deterring the transportation and trade in illegal nuclear materials, and to guard the borders against threats of terrorism. One of Customs many strategies in dealing with this area is the deployment of PRDs to airports and land border ports. PRDs are small devices that hook on to Customs inspectors' belts. When a certain level of radiation is detected, the PRDs emit an alarm. To date, over 3,400 PRDs have been sent to the ports for use by Customs inspectors. When more funds become available, Customs plans to issue PRDs to all of its inspectors.

On June 22, 1998, Customs issued a Standard Operating Procedure (SOP), entitled *Radiation Detection Program*. This document, addressing the use of PRDs and larger radiation detection equipment, requires those inspectors issued PRDs to wear and use them while performing inspector duties. The SOP also requires ports to issue local policies and to assign a Radiation

Detection Coordinator to oversee port activities, including distribution and maintenance of the PRDs.

Ports Are Not Always In Compliance With Radiation Detection Policies

Ports have implemented local Radiation Detection Policies, but inspectors are not always wearing and using PRDs when performing inspection duties. During our field visits to ports, we randomly asked a total of 97 inspectors at 10 ports to show us their PRDs and demonstrate to us that they were in working order. Eight of the 97 did not have their assigned PRDs with them, and 4 had them but they were not operable. These four inspectors told us that their PRDs needed batteries but they had not taken the time to replace them.

We were also informed that some inspectors do not turn the PRDs on because of periodic false readings or calibration problems, and one commented that, even though you may have been issued a PRD, "...if you don't have it, nobody notices." -----

Also, at the Port of Miami, we found 25 PRDs locked in a file cabinet and unassigned for over a year. When we brought this matter to local management, they stated that the PRDS would be immediately assigned to inspectors.

Need To Track And Evaluate PRD Performance

Customs does not presently collect data on incidents involving PRDs. According to Customs officials, during the early distribution of PRDs, reports on radiation incidents were forwarded to Headquarters OFO. Customs told us that these incidents, plus others known to the ATD, showed the use of PRDs have resulted in:

- several detections of unmarked hazardous materials (inbound and outbound),
- detection of illegal imports of nuclear material,

-
- safety concerns with radioactive material passing through the port of entry, and,
 - an intentional instance of incorrectly documenting and labeling a shipment as containing radioactive Cesium to disguise 20 pounds of cocaine.

We believe significant incidents involving PRDs need to be formally reported, tracked, and evaluated by Customs Headquarters. Capturing this information may be valuable for national security concerns, useful to other federal agencies, and may provide useful enforcement analysis.

Recommendations

1. The Commissioner of Customs should ensure, through the use of self-inspections, or some other form of monitoring, that the existing policy requiring Personal Radiation Detectors use be followed.

Management Comment. Customs concurred and the Management Inspection Division will be asked to include Personal Radiation Detectors as part of their core review areas when conducting audits at field locations. In addition, the Customs Self-Inspection Program includes the use of worksheets for radiation detectors at the locations where the devices are used.

OIG Comment. We consider this recommendation to have a satisfactory management decision with final action completed.

2. The Commissioner of Customs should require ports that are not using Personal Radiation Detectors to justify why they are not using them, and require the Personal Radiation Detectors be sent to other ports that can make use of them.

Management Comment. Customs concurred and will update its SOP for the Radiation Detection Program to mandate that Personal Radiation Detectors be issued to uniformed officers and that they be used daily. In addition, a memorandum to that effect will be distributed to all field offices.

OIG Comment. We consider this recommendation to have a satisfactory management decision. However, final action remains pending the updating of the SOP and the issuance of the memorandum.

-
3. The Commissioner of Customs should ensure that data is captured for significant incidents involving Personal Radiation Detectors.

Management Comment. Customs concurred and has updated its Radiation Detection SOP to require the reporting of significant instances.

OIG Comment. We consider this recommendation to have a satisfactory management decision with final action completed.

Finding 5

Unneeded Equipment Funded By The Consolidated Omnibus Budget Reconciliation Act Was Not Transferred

. The basis for this belief was that COBRA specifies how user fees are to be used. One usage is for the provision of inspectional personnel and equipment to enhance Customs services for those persons paying the fee. The statute also includes a proportionality clause that directs the enhanced salaries and equipment be "...distributed on a basis proportionate to the fees collected." Thus, the local Customs personnel believed that the equipment could only be used in an airport facility where Customs collected passenger user fees.

Customs Headquarters officials stated that, as a result of this legislative language, there has always been a great deal of confusion within Customs as to the process of disposing of COBRA-funded equipment. Customs Chief Counsel's Office provided the following opinion:

Customs indicated the above guidelines provide the ports with the necessary latitude for the disposition of equipment. However, we believe not all Customs locations that have unused or unneeded COBRA-funded NII equipment are fully aware of these guidelines. As a result, some NII equipment acquired through COBRA funds may not be used in an optimum manner.

Recommendation

1. The Commissioner of Customs should issue a written notice to all Customs ports directing them to identify non-intrusive inspection equipment funded by the Consolidated Omnibus Budget Reconciliation Act of 1985 and follow the procedures outlined in the Chief Counsel's opinion on transferring or disposing of such equipment that is not being used by a given location.

Management Comment. Customs concurred. Customs will post a notice on the Personal Property Bulletin Board, and include this information in the *Customs Property Handbook*.

OIG Comment. We consider this recommendation to have a satisfactory management decision. However, final action remains pending the updating of the property handbook and the posting on the bulletin board.

* * * * *

We would like to extend our appreciation to Customs for the cooperation and courtesies extended to our staff during the review. If you have any questions, please contact me at (617) 223-8640 or Richard Tyler, Audit Manager, at (617) 223-8643. Major contributors to the report are listed in Appendix 4.

/s/
Donald P. Benson
Regional Inspector General for Audit

Appendix 1 Objectives, Scope, and Methodology

The objective of this audit was to determine if pieces of high technology equipment, acquired for counterdrug and other enforcement activities, are adequately justified, can be accounted for, and are effectively used. To accomplish this objective, our audit work included the following:

- Visited the following Customs facilities and conducted interviews with various Customs officials:
 - ◆ JFK Airport, New York
 - ◆ Boston, Massachusetts
 - ◆ Newark, New Jersey
 - ◆ Miami, Florida
 - ◆ Port Everglades, Florida
 - ◆ Laredo, Texas
 - ◆ Pharr/Hidalgo, Texas
 - ◆ Brownsville, Texas
 - ◆ Nogales, Arizona
 - ◆ Detroit, Michigan.
- Interviewed Customs Headquarters personnel from OFO and OIT.
- Observed NII equipment in use at the ports we visited.
- Reviewed applicable policies, procedures, directives and manuals.
- Reviewed and evaluated equipment utilization logs, property inventory files, and training records.
- Reviewed enforcement results related to the NII equipment.

The dates of the documents we reviewed ranged from FY 1998 to FY 2000, inclusive. We performed our field work from November 1999 to October 2000. We conducted our audit work in accordance with generally accepted government auditing standards.

DESCRIPTION OF EQUIPMENT/SYSTEMS

AIRPORT / MAIL X-RAY INSPECTION SYSTEM (101 GT/GTA) - An easily moveable detection system that can inspect large packages, baggage, and mail and provides detection of explosives, illegal drugs, and metal weapons.

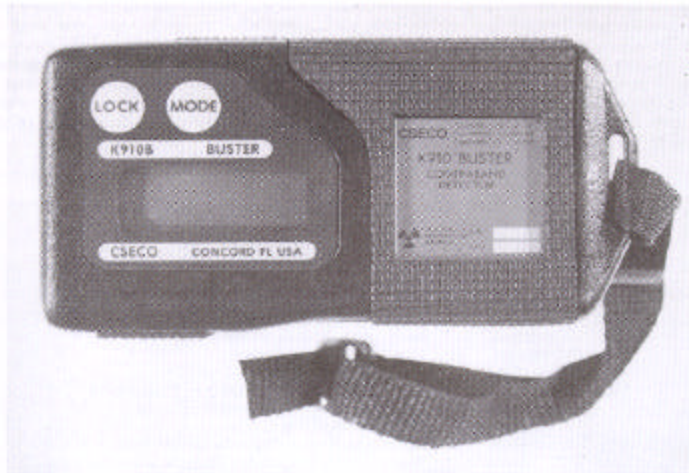


Model 101GT

AUTOMATED TARGETING SYSTEM (ATS) - A computer software system designed to assess shipment entry information for known smuggling indicators and identify and direct inspectional attention to high-risk shipments. The system has a number of components regarding the filtering of shipment data processed against a series of rules, including query capability, report production, and the ability to place holds on shipments for document review or for an inspection.

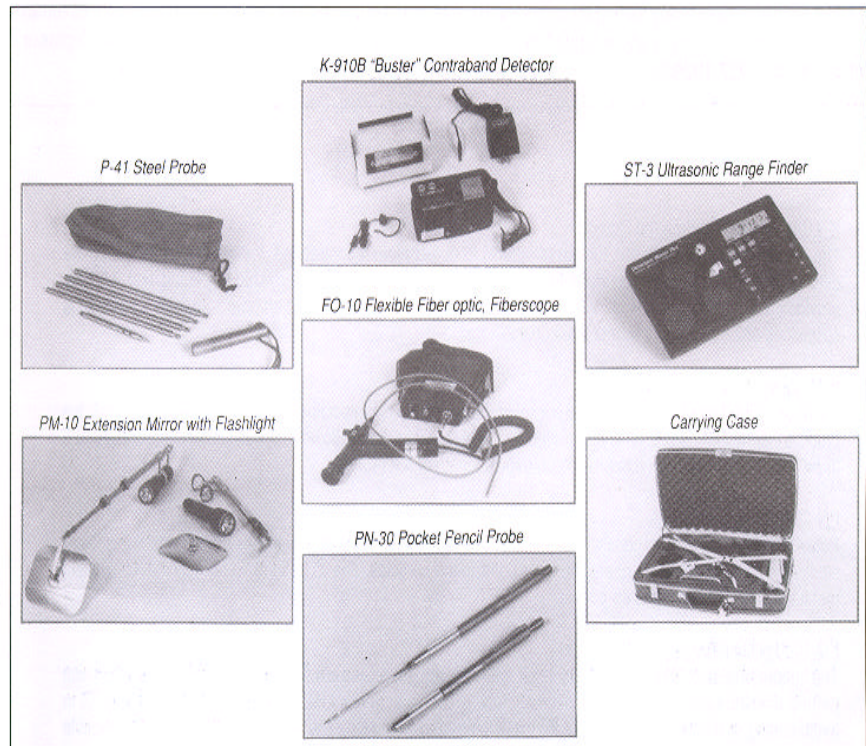
Appendix 2
Description of Equipment/Systems

BUSTER - The Portable Contraband Detector “Buster” examines areas not normally accessible to inspectors. It is a hand-held device that detects unusual densities behind homogenous surfaces, such as walls or roofs of cargo containers, car doors, or fenders. For example, ordinary car tires, filled only with air, when measured by the buster, give density readings within a known range. However, if contraband is hidden in the tire, the density reading will be higher than normal. The Buster weighs just 3 pounds and uses a microprocessor and gamma ray backscatter technology.



Radiation Detection Device, Model K-910B (Buster)

CONTRABAND DETECTION KITS - These kits provide field officers with proven technology in kit form for convenience and security. Each contraband detection kit contains: a portable contraband detector (or Buster), a fiber optic scope, an ultrasonic range finder, a metal pocket probe, cargo probes, and an extension mirror.



Contraband Detection Kit (CDK)

FIBERSCOPE - Used on vehicles to perform visual examinations in areas inaccessible to inspectors, such as behind walls, door panels and in air conditioning vents. Safe to use in solvents and gasoline for fuel tank inspections. Used on boats for inspections under decks and other hard to examine areas.

FIXED-SITE TRUCK X-RAY - (See page 27 for a photograph.) A detection system that can inspect large trucks, automobiles, or cargo containers. This unit provides detection of explosives, illegal drugs,

Appendix 2 Description of Equipment/Systems

and metal weapons. The truck x-ray system is made up of three main components: (1) x-ray inspection system (XRIS); (2) the facilities required to house the various XRIS components; and (3) ancillary equipment required to support or complement the system.

The x-ray subsystem creates "flying spot" x-ray beams that scan a vehicle as it is being towed by a transport system. Transmission detectors sense the intensity of the x-ray beam that passes through the vehicle being scanned. Backscatter and sidescatter detectors sense scattered radiation from the interaction of the x-ray beam and the scanned vehicle. Images are formed and transmitted for display at an operator's console.

The operator's console is equipped with the software necessary to display images for analysis; store, annotate and print the images; and create and store database records.

ITEMISER - Is a dual function detection and identification system, ideally suited for detecting trace quantities of narcotics and explosives. The Itemiser searches for trace quantities of contraband that may contaminate the surfaces of baggage, vehicles, cargo pallets, and all types of containers in which contraband is hidden.

LASER RANGE FINDERS - This equipment detects hidden compartments in a cargo container by using a laser beam to measure the length. Eliminates the need for the inspector to physically measure it, which is not always possible when the container is loaded.

Appendix 2
Description of Equipment/Systems

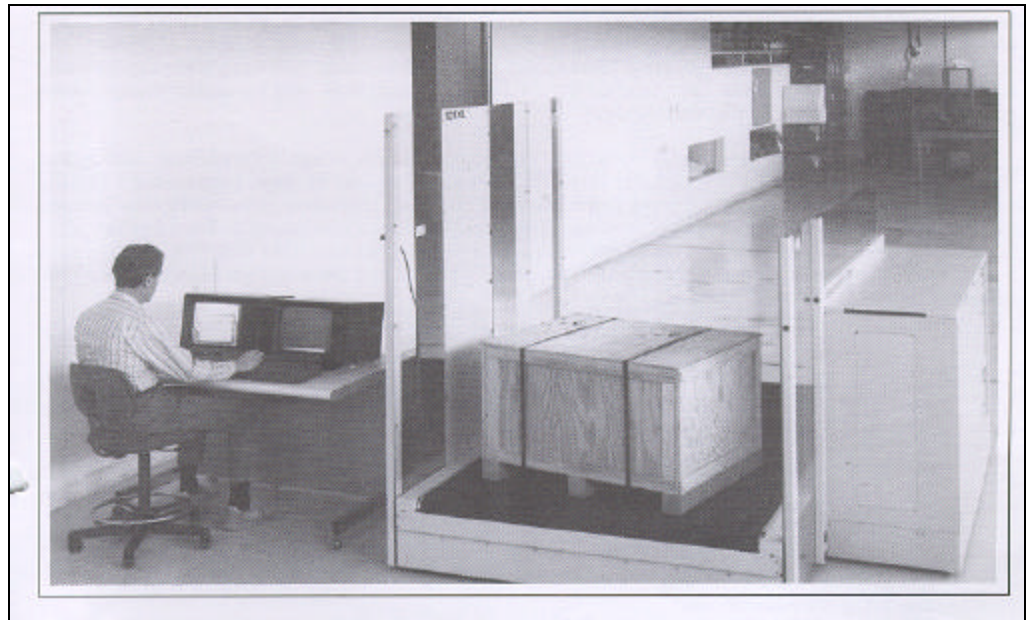
MOBILE X-RAY VAN - General Motors vans that have the ability to inspect break-bulk cargo, baggage, mail parcels. Differentiating high density and low density objects in confused and non-confused backgrounds. Also provides rapid deployment capability by a single inspector or entire crew of inspectors.



Model 101 Van

MOBILE TRUCK X-RAY (MTXR) - (See page 6 for a photograph). A non-intrusive x-ray system providing images of vehicles and trucks for contraband such as drugs, guns, and currency. The MTXR is housed in a cabinet on a truck chassis and is operated by a three-man crew. It operates by slowly driving past a parked vehicle with an extended x-ray boom going over the target vehicle. When the inspection process is complete, the x-ray unit folds quickly into its storage cradle for over-the-road transport to the next intended usage site.

PALLET X-RAY INSPECTION SYSTEM - A detection system that can inspect large objects that will not fit into smaller units and provides detection of explosives, illegal drugs, and metal weapons. Used by Customs at many locations for palletized cargo inspection.



Model 101XL

RADIATION PAGER /PERSONAL RADIATION DETECTOR (PRD) - The radiation pager, weighing only 6 ounces, is a personal gamma-ray radiation detector for use in the interdiction and location of nuclear materials. This equipment is approximately the size of message pager and is intended to be worn on a belt. The pager/PRD can operate for year or more on a pair of commonly available AA alkaline batteries.

VEHICLE AND CARGO INSPECTION SYSTEM (VACIS) - This system is capable of effective and efficient non-intrusive inspection of tankers, cargo vehicles, including trailer trucks, and trailer mounted sea and air containers. This system may also be used for inspection of smaller vehicles such as cars, pick-up trucks, and towed vehicles, e.g. trailers and boats. It can be used to detect contraband located in the vehicle's structure, tires, gas tanks, and hidden compartments. The system is modular and is capable of being disassembled, relocated, and reassembled.

The VACIS is capable of processing a typical vehicle every 4 minutes. Since there are no vehicle weight or width restrictions, the VACIS is optionally suited for the inspection of vehicles that cannot meet the restrictions of the fixed-site truck x-ray.

The vehicle to be examined will remain stationary as a detector tower and a radiation source enclosure move in tandem along separate tracks along the side of the vehicle. Each track is 90 feet long. The detector track is 6 feet wide and the source track is 4 feet wide.

A command center contains the operator's console.



VACIS

Appendix 3
Management Comments



U.S. Customs Service

Memorandum

DATE: August 1, 2001

MEMORANDUM FOR DONALD P. BENSON
REGIONAL INSPECTOR GENERAL FOR AUDIT

FROM: Director,
Office of Planning

SUBJECT: Draft Audit Report on the United States Customs
Service's Non Intrusive Inspection Technology

Thank you for providing us with a copy of your draft report entitled "Narcotics Interdiction: Customs Management Action Needed To Ensure Benefits Of Non-Intrusive Inspection Technology Are Fully Realized " and the opportunity to discuss the issues in this report.

Customs has taken a number of steps to address the issues identified during your review. These steps, and additional on-going actions, are outlined in the attached document, as are Customs comments on this draft report.

While the actions Customs will take in response to the recommendations will further strengthen management controls over the NII program, we believe that the draft report does not fully characterize important facts concerning the NII program. Specifically:

- Considerable progress has been made in a rather short period of time. With the receipt of emergency funding in a Fiscal Year (FY) 1999 supplemental appropriation, the emphasis has been on obtaining and deploying NII equipment across the field. The management mandate to deploy aggressively has been met and the equipment is helping Customs personnel do examinations that could not previously be done, or could not be done without confronting inspectors with physically demanding and sometimes dangerous work.
- The equipment is contributing to the narcotics interdiction effort. From FY 1999 through May 31st of FY 2001, NII systems have performed over 700,000 exams and contributed to the seizure of over 335,000 pounds of illegal drugs. These results were accomplished while the

TRADITION

★

SERVICE

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HONOR

Appendix 3 Management Comments


equipment was still new in the field and during the period when many sites were still waiting for the deployments to be completed.

- Despite the aggressive equipment deployment schedule that Customs followed, there have been 60 major systems deployments without significant difficulties.

We believe that these are key points that reflect more fully on the NII experience to date.

We have determined that the information in the audit does not warrant protection under the Freedom of Information Act.

If you have any questions regarding the attached comments, please have a member of your staff contact Ms. Michele Donahue at (202) 927-0957.



William F. Riley

Attachment

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Attachment

Attachment

Responses to Audit Recommendations
OIG Draft Report on Non-Intrusive Inspection Technology

Finding 1 Recommendation 1: The Commissioner of Customs should ensure that the effectiveness of non-intrusive inspection equipment is measured.

Response: Concur. Customs is currently measuring the effectiveness of NII equipment manually, and is developing an automated system. While Customs concurs with the recommendations in general, we must point out that we have been manually collecting data and measuring the performance of the deployed Non-Intrusive Inspection (NII) systems for over 3 years. Many of the statistics such as exams per seizures performed and number of exams per pound seized have been calculated and examples were given to the auditors in written responses to their questions.

Also discussed with the auditors and not mentioned in the Draft are Customs efforts to develop an automated system to replace the manual data collection methods. This concept was proven in pilot testing at Nogales, AZ in 1999-2000. Customs is now moving the system through the Systems Development Life Cycle (SDLC) in compliance with Customs and Treasury policies. This system, once deployed, will allow Customs to collect data on system throughput, enforcement results, maintenance and repair actions, and utilization. This system will allow Customs to evaluate this data in near real-time and share it across all ports and headquarters.

Finding 1 Recommendation 2: The Commissioner of Customs should ensure that quality controls are established so that seizure data is accurate.

Response: Concur. Customs will implement changes to its database practices to do periodic and selective comparison of database records against SEACATS, the official record for seizure data.

Finding 1 Recommendation 3: The Commissioner of Customs should ensure that Customs better collects and analyzes non-intrusive inspection utilization data and, based on this analysis, takes action to ensure that the equipment is optimally utilized.

Response: Concur. Customs concurs with the recommendation and will take appropriate steps to ensure optimal utilization of deployed NII equipment. However, it is important to note that Customs recognized the need for an operational and procedures plan for NII systems in the initial

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stages of deployment and provided instructions to its officers. A Memorandum dated November 19, 1999, was issued to all field locations, distributing a National Assignments Agreement between Customs and the National Treasury Employees Union as well as a detailed standard operating procedure on NII staffing, scheduling, operating hours, and secondary operator training.

Additionally, a Memorandum dated May 23, 2001, was distributed to all Field Directors which clarified Customs expectations on the effective utilization of deployed NII equipment. A revised form aimed at improving the manual collection of utilization data will shortly be issued pending the development of an approved automated system.

Finding 2 Recommendation 1: The Commissioner of Customs should ensure that detachable radiation detectors, Fiber Optic Scopes, and Laser Range Finders are accounted for separately in the Property Information Management System.

Response: Action completed. During the last quarter of FY 2000, procedures were changed to insure NII equipment is being recorded accurately and timely. Procedures include:

- Contraband Detection Kits (CDKs) are recorded as 4 separate records (Buster, fiberscope, laser range finder, and CDK case) by the Fleet and Property Management Branch (FPMB) regardless of the value. Previously two records were created; one for the Buster and one for the CDK.
- All other NII equipment valued less than \$5,000, e.g., Personal Radiation Detectors (PRDs), is recorded by the Applied Technology Division (ATD) under their organization code and then transferred to the applicable field organization code. Previously records were to be created by field organizations.

Finding 2 Recommendation 2: While NEEMR has taken action to correct certain deficiencies, the Commissioner of Customs should emphasize to all Customs employees the need to adhere to prescribed Property Information Management System property procedures.

Response: Concur. Another procedure change that was implemented is Centralized Data Entry records for mobile x-ray vans, and x-ray machines, (referred to as equipment exceeding \$5,000) are created under ATD's organization code when the obligating document (Treasury contracts, interagency agreement) is received by FPMB. Once the actual receiving organization is known, the record is updated to reflect that organization code.

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Previously temporary shell records for X-Ray machines and trucks were not automatically created and a delay was incurred until the equipment was **inspected/accepted** by ATD. Once the inspection took place and the x-ray machine or truck was accepted, only then, was supporting financial documentation provided to FPMB. Because these items are procured using an interagency agreement or a Treasury contract, the normal creation of temporary property records from procurement were not generated, so hard copy supporting documentation was required to create PIMS records. This procedure would cause a delay in recording the equipment in PIMS.

On page 21, the OIG noted 10 equipment items such as mobile VACIS, x-ray machines and mobile x-ray vans that were not recorded in PIMS, but were observed during the audit. Also, the items were not in PIMS because of delays in recording the items in PIMS by the Indianapolis Property Staff.

After obtaining serial numbers from the OIG on July 25, 2001, Customs records showed that 8 of the items are recorded in PIMS and the remaining 2 items included a DOD prototype VACIS that did not belong to Customs and one van that the OIG agreed should not be recorded in PIMS.

The 8 Customs items in PIMS included 5 items recorded in PIMS prior to the OIG audit, including 4 that had been recorded in PIMS since 1995. Subsequent to the OIG physical inspection, the 3 remaining items were recorded in PIMS. Customs recognizes that there are timing differences in receipt and recording items into PIMS, but Customs has implemented compensating controls to ensure accountability. For example, although not recorded in PIMS, the 3 items were recorded in Customs accounting system at the time of acceptance. To ensure that property received and recorded in Customs accounting system is recorded in PIMS, Customs periodically reconciles PIMS and its accounting system.

Further, the procedure changes noted above will rectify or have rectified many of the deficiencies noted, e.g., detachable units are now recorded separately, PRDs are recorded by ATD and then transferred to field organizations, equipment exceeding \$5,000 is recorded when the obligating document is received versus physical receipt.

Finding 2 Recommendation 3: The Commissioner of Customs should issue a notice emphasizing the need and importance of accounting for Busters on a routine basis and should require the use of Buster logbooks.

Response: Concur. The use of CF259s is addressed in the new Personal Property Management Handbook, which will be printed and distributed by

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the end of the fiscal year. Use of CF259s is also included in the Personal Property Self-Inspection Worksheet which is utilized Customs-wide. The worksheet can be amended to specifically address NII and high-technology enforcement equipment (HTEE). Also, FPMB can recommend to the Management and Inspection Division that when conducting their reviews they include NII and HTEE.

Finding 2 Recommendation 4: The Commissioner of Customs should issue a notice emphasizing the need to ensure that CF259s for Personal Radiation Detectors are properly maintained.

Response: Action completed. See response to Finding 2, recommendation 1 above.

Finding 2 Recommendation 5: The Commissioner of Customs should ensure that the use of self-inspections, or some other form of monitoring, that controls over non-intrusive inspection equipment are being deployed.

Response: Concur. Use of CF259s is included in the Personal Property Self-Inspection Worksheet which is utilized Customs-wide. The worksheet will be amended to specifically address NII and high-technology enforcement equipment (HTEE). Also, FPMB will recommend to the Management and Inspection Division that when conducting their reviews they include NII and HTEE.

Finding 3 Recommendation 1: The Commissioner of Customs should direct Customs officials in Headquarters and Indianapolis to meet with the appropriate GSA officials to further discuss problems associated with the installation and deployment of large non-intrusive inspection systems, and develop solutions to prevent them from recurring.

Response: Concur. A meeting will be scheduled with the General Services Administration and Customs officials from Headquarters and Indianapolis to discuss and reduce problems associated with installing and deploying large non-intrusive inspection systems.

Finding 3 Recommendation 2: The Commissioner of Customs should ensure that a formal planning process be adopted for the deployment and installation of the major non-intrusive inspections systems and that the process be monitored to ensure compliance.

Response: Concur. Customs will document its planning process. However, Customs believes it is important to note that it has followed an effective, coordinated planning process that has met demands for aggressive installation of NII equipment across the field with very minimal

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problems. The report notes some issues with 3 installations, the specifics of which could be debated. The larger point is that there have been 60 major systems deployments without significant difficulties.

Finding 3 Recommendation 3: The Commissioner of Customs should ensure that, at all ports with large non-intrusive inspection systems, a process is developed to ensure that all conveyances directed for examination by these systems, do in fact report for inspection.

Response: Customs will conduct an analysis of options for providing greater assurance that conveyances directed for examination do in fact report for inspection. This analysis will consider the pros and cons of the options. It should be recognized that the peculiarities of specific port locations do pose limitations to the options Customs has in siting this equipment, and that these factors are always considered in deciding where to place the equipment.

Finding 4 Recommendation 1: The Commissioner of Customs should ensure, through the use of self-inspections, or some other form of monitoring, that the existing policy requiring Personal Radiation Detectors use be followed.

Response: Concur. The Management Inspection Division (MID) will be asked to include Personal Radiation Detectors as part of their core review areas when conducting audits at field locations. The Customs Self-Inspection Program has incorporated the Customs Radiation Detector Program into the Self-Inspection worksheets at locations where the devices are issued.

Finding 4 Recommendation 2: The Commissioner of Customs should require ports that are not using Personal Radiation Detectors to justify why they are not using them, and require the Personal Radiation Detectors be sent to other ports that can make use of them.

Response: Concur. The Standard Operating Procedures for the radiation Detection Program, updated January 2001, will be revised to mandate that Personal Radiation Detectors be issued to uniformed officers and that they be used on a daily basis. A memorandum to that effect will be distributed to all field locations.

Finding 4 Recommendation 3: The Commissioner of Customs should ensure that data is captured for significant incidents involving Personal Radiation Detectors.

Response: Concur. The revised Radiation Detection Program Standard Operating Procedure (SOP), dated January 2001, mandates the reporting of significant incidents and provides appropriate instructions for such

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reports. Each port is responsible for having its own radiation response plan. This plan can be incorporated into the Port's existing Port Emergency Plan. The SOP assigns the senior officer on site responsibility to insure that all reports are completed and distributed and that the Customs Situation Room is notified of each incident.

Finding 5 Recommendation 1: The Commissioner of Customs should issue a written notice to all Customs ports directing them to identify non-intrusive inspection equipment funded by the Consolidated Omnibus Budget Reconciliation Act of 1985 and follow the procedures outlined in the Chief Counsel's opinion on transferring or disposing of such equipment that is not being used by a given location.

Response: Concur. A Notice will be posted on the Personal Property Bulletin Board, emphasizing that COBRA property no longer needed must be offered to other areas of Customs that perform the same activities. However, if those areas that perform the user fee function do not need or want the equipment, it may be transferred to another Customs program which performs other user fee functions. In addition, the notice will state that if the property is not needed by programs that perform user fee functions it may be transferred to other Customs functions or out of the agency. Such information will also be included in the Customs Property Handbook.

Northeastern Region

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Appendix 5
Report Distribution

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