

Non-Intrusive Inspection (NII) Systems

INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance

MISSION

To protect U.S. forces and critical warfighting materiel by inspecting cars, trucks, or cargo containers for the presence of explosives, weapons, drugs, or other contraband with nuclear (gamma) and X-ray technology.

DESCRIPTION

The Non-Intrusive Inspection (NII) systems consist of commercial off-the-shelf (COTS) products that are employed within a layered force protection system that includes security personnel trained to maintain situational awareness aided by a range of other products including military working dogs, under-vehicle scanning mirrors, and handheld or desktop trace explosive detectors. The NII systems produce a graphic image from which a trained operator can “look into” places such as false compartments that other systems cannot see.

NII systems currently include a variety of products with differing characteristics that are added to the Army commander’s “tool box”. They include mobile, rail-mounted but re-locatable, and fixed site characteristics. The primary systems employed are as follows:

The **Mobile Vehicle and Cargo Inspection System (MVACIS)** is a truck-mounted system that utilizes a nuclear source that can penetrate approximately 6.5 inches of steel. It can be employed in static locations or moved rapidly between access control points to provide protection where it is most needed.

The **Re-locatable Vehicle and Cargo Inspection System (RVACIS)** is a rail-mounted system that utilizes the same nuclear source as the MVACIS. It operates on rails and is employed in static locations or moved within 24 hours to locations where prepared use of the rail system eliminates the requirement to maintain a truck platform and the presence of an overhead articulated arm that can be struck and damaged by vehicles being scanned.

The **Militarized Mobile VACIS (MMVACIS)** uses the same gamma source as the other VACIS products. It is mounted, however, on a High Mobility Multipurpose Wheeled Vehicle (HMMWV). MMVACIS provides a capability that other NII systems do not: off installation external vehicle checkpoints in remote locations.

The **Z-Backscatter Van (ZBV)**, manufactured by American Science & Engineering (AS&E), is a van-mounted, system that utilizes backscatter X-ray technology. While it can penetrate only approximately ¼ inch of steel it can be employed in static locations where room is limited and scanning of cars, larger vehicles, or containers with smaller, less complex loads is expected.

SYSTEM INTERDEPENDENCIES

None

PROGRAM STATUS

- **FY08:** MMVACIS/RVACIS procurement and fielding
- **FY09:** ZBV procurement and fielding

PROJECTED ACTIVITIES

- **1QFY10:** MMVACIS Fielding

ACQUISITION PHASE

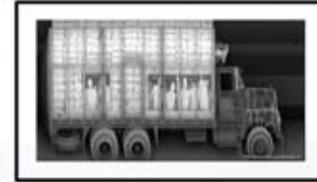
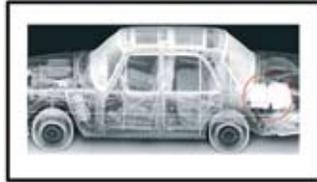
Technology Development

Engineering & Manufacturing Development

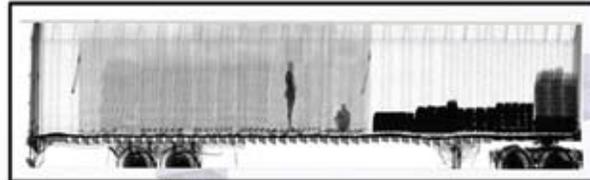
Production & Deployment

Operations & Support

**Non-Intrusive Inspection (NII)
Systems**



ZBV BACKSCATTER



RVACIS[®]
MOBILE VACIS



MMVACIS[®]
MILITARY MOBILE VACIS



MVACIS[®]
RELOCATABLE VACIS

FOREIGN MILITARY SALES

None

CONTRACTORS

- American Science & Engineering, Inc.
(Billerica, MA)
- Rapiscan Systems (Torrance, CA)
- Science Applications International Corp.
(SAIC) (San Diego, CA)

