

# Non-Intrusive Inspection Systems (NIIS)

INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance

MISSION

Protects 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 Systems (NIIS) program consists 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.

NIIS 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.

- 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.
- The **Militarized Mobile VACIS (MMVACIS)** uses the same gamma source as the other VACIS products but is mounted on a High Mobility Multipurpose Wheeled Vehicle.
- The **Z-Backscatter Van (ZBV)** is a van-mounted system that utilizes backscatter X-ray technology. It penetrates only approximately one-quarter inch of steel and can be employed in static locations where room is limited.
- The **BVMT** is a mobile inspection system for vehicles and cargo that uses the same backscatter X-ray technology as the ZBV. The BVMT trailer contains the X-Ray source

and backscatter detectors while the Forward scatter trailer contains the forward scatter detectors.

- **Personnel Scanners** utilize Backscatter X-ray technology to non-intrusively scan people for the presence of explosives, weapons, or other contraband and are American National Standards Institute compliant. Depending on the model, these systems can scan between 140-240 people per hour.
- The **T-10 Trailer** is a high-energy gantry vehicle and cargo scanner and uses a 1 MeV Liner Accelerator that penetrates up to four inches of steel while scanning.

SYSTEM INTERDEPENDENCIES

None

PROGRAM STATUS

- Fielded 31 BVMT
- Fielded 154 Personnel Scanners
- Delivered One HE T-10 Trailer

PROJECTED ACTIVITIES

- **2QFY12:** Program Management support; preparing documentation for a contract on replacement of 29 older systems that have reached their useful life and do not provide stand-off capabilities

ACQUISITION PHASE

Technology Development

Engineering and Manufacturing Development

Production and Deployment

Operations and Support

## Non-Intrusive Inspection Systems (NIIS)

### FOREIGN MILITARY SALES

None

### CONTRACTORS

American Science & Engineering Inc.

(Billerica, MA)

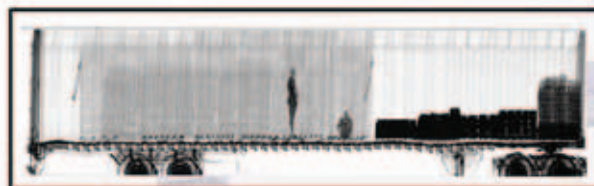
Rapiscan Systems (Torrance, CA)

Science Applications International Corp.

(SAIC) (San Diego, CA)



## ZBV BACKSCATTER



## RVACIS<sup>®</sup>

MOBILE VACIS



## MVACIS<sup>®</sup>

RELOCATABLE VACIS



## MMVACIS<sup>®</sup>

MILITARY MOBILE VACIS

