



Compact design

The complete system including the handheld computer, custom software, satellite phone, batteries, and associated cables are self-contained in a briefcase size rugged case. The RadRelay™ user interface software only requires a few button clicks to download and transfer the data.

Background Cargo shipments inbound to a country's ports are subject to routine ship inspections. With respect to ships inbound to the United States, the U.S. Coast Guard may conduct ship inspections up to 200 miles from port using handheld isotope identifiers. There are times when an isotope spectrum is detected but cannot be identified using onboard equipment and personnel. In such instances, there may be a significant delay in clearing the ship and cargo shipment for entry into U.S. waters. These resulting delays are costly to the shipping company, the owners of the cargo, and ultimately the consumer.

By being able to download and transmit the spectra of the suspect material, the RadRelay™ device and process curtails the amount of time needed to make a positive identification of the material detected and clear the ship for port entry.

RadRelay™

A Wireless System For Remote Instrument Data Download And Transfer

RadRelay™ is a portable system that allows an operator to download data from various devices like thumb drives, digital cameras, or radiation detectors, and transfer the information via satellite to almost anywhere in the world. Radiation detectors such as handheld isotope identifiers may not always identify all spectra collected so the RadRelay™ system is used to download the spectra and send it wirelessly to a shore based lab for further analysis.

at a glance

- Lightweight
- Portable
- Rugged
- User friendly
- Avoids costly shipping delays

Demonstrated capability

The RadRelay™ has a demonstrated and proven record of improved capability to transmit data, collected from instruments, to the Customs and Border Patrol's (CBP's) Laboratories and Scientific Services (LSS) Receiving Station for rapid analysis. RadRelay™ offers a rugged, lightweight, and portable system that provides a reliable, simple, and fast method of data download and transfer from any remote location to the LSS Receiving Station or other evaluation center.

Patents & Licenses

A patent application has been filed for the RadRelay™ with the U.S. Patent and Trademark Office. A registered copyright has been received by the U.S. Copyright Office.

Technology transfer

The Savannah River National Laboratory (SRNL) is the U.S. Department of Energy's (DOE) applied research and development laboratory at the Savannah River Site (SRS). With its wide spectrum and expertise in areas such as homeland security, hydrogen technology, materials, sensors, and environmental science, SRNL's cutting edge technology delivers high dividends to its customers.

The management and operating contractor for SRS and SRNL is Savannah River Nuclear Solutions, LLC. SRNS is responsible for transferring its technologies to the private sector so that these technologies may have the collateral benefit of enhancing U.S. economic competitiveness.

Partnering opportunities

SRNS invites interested companies with proven capabilities in this area of expertise to enter into a licensing agreement with SRNS to market this nuclear material detection system. Interested companies will be requested to submit a business plan setting forth company qualifications, strategies, activities, and milestones for commercializing this invention. Qualifications should include past experience at bringing similar products to market, reasonable schedule for product launch, sufficient manufacturing capacity, established distribution networks, and evidence of sufficient financial resources for product development and launch.

for more information

Dale Haas, Commercialization Manager

Savannah River National Laboratory
Bldg. 773-41A, Rm. 238, Aiken, SC 29808

Phone: 803-725-4185

Fax: 803-725-4988

E-mail: dale.haas@srnl.doe.gov