Eastern U.S.'s Fourth-Busiest Port Embraces RFID

The South Carolina State Ports Authority joins 80 ports worldwide in becoming part of the Savi RFID network.

By Claire Swedberg

Feb. 28, 2007—The South Carolina State Ports Authority (SCSPA) in Charleston is the latest port in the United States to begin deploying a Savi Networks SaviTrak RFID system. The installation will take place at its three terminals—Wando Welch, North Charleston and Columbus Street—allowing cargo owners to track containers traveling into and out of the port.

"This [participation in the Savi network] provides an additional service to our customers," says Byron D. Miller, spokesman for the SCSPA. Miller notes that one major shipper using the port had expressed an interest in employing Savi RFID tags to track its shipments throughout the South Carolina port, and that the port found other customers felt the same way, as well.

Therefore, sometime within the next two months, Savi will install tag interrogators at the Charleston terminals, and at the gates where containers are loaded onto and off of trucks and trains.

Containers employing the system will be tagged with battery-powered Savi ST-676 ISO Container Security Tags for RFID tracking, which transmit data at 433 MHz to readers deployed within a 100-foot range. When an ocean shipment arrives at the port, interrogators deployed at each terminal will capture the unique ID number of each tagged container, then inform the Savi Network server that the shipment has arrived. When a shipment is loaded by crane onto a truck or train, interrogators attached to the cranes will read the tag numbers once more. For shipments leaving the port by boat, the same system will read the tags as each container is removed from the truck or train, and again as it leaves the terminal by ocean vessel.

Operators can also have sensors connected to those tags to track whether a container door has been opened or closed, or whether there has been any shock to the container, as well as to record changes in humidity or temperature measurements. The SaviTrak network can then send that data directly to the involved parties via an e-mail alert. Built upon open technologies, the SaviTrak information service can receive and process data feeds from standards-based RFID technologies, bar codes, EPC-compliant passive RFID tags and GPS, though interrogators at Charleston will not use such technologies. In addition, SaviTrak provides customers with real-time status about scheduling and financial impacts on their in-transit inventory.

Miller says the port undertook an RFID pilot using Savi tags two years ago, adding, "We certainly saw returns [on the investment of RFID hardware]." That ROI was the result of greater efficiency and control of the containers in the port.

The Charleston port is joining more than 80 others worldwide in becoming part of the SaviTrak network, enabling cargo shippers with Savi RFID tags on their containers to track shipments. "The South Carolina Port,

being a major hub of container cargo, is an important place for us to be," says Lani Fritts, Savi Networks' chief operating officer. "This connects South Carolina with all the other ports [participating in the Savi network]."

RELATED_ARTICLES Last summer, the Port of Savannah deployed Savi's system (see Georgia Cargo Terminals Becoming RFID-Enabled). In October 2006, the Port Authority began deploying RFID systems from Savi and GE Security (see RFID Adds to Security at Virginia Port Authority).

In 2006, Charleston ranked as the fourth-busiest container port on the East and Gulf coasts. The port ships 2 million container shipments a year, Miller says, between the United States and Asia, North and South America, and Europe.