

# Technology In Our Lives

## First Responders Better Prepared With New Radio Technology

(NAPSA)—Shortly after the first plane hit the North Tower of the World Trade Center on September 11, 2001, police on the scene issued an urgent radio call for evacuation of the entire complex.

That order, given on a radio frequency used by one group of officials, was never heard by many other first responders on the scene. Just minutes later, the second plane hit the South Tower.

As noted in “The 9/11 Commission Report,” the call to evacuate was “given over WTC channel W,” a frequency used by only some of the scene’s first responders. As a result, the lifesaving evacuation message went unheard by many—and for some, arrived too late.

Americans learned many lessons from the tragic events of September 11. One national priority, highlighted by the 9/11 Commission, was the need for “interoperable” communications—a single radio that would enable one department, agency or single first responder to communicate with officials using any of the public safety frequency bands.

In response, the Department of Homeland Security (DHS) began research, development and deployment of a new technology that would ultimately solve the interoperability problem. State and local government officials around the U.S. are now being introduced to new radio technologies that are the direct result of the lessons learned in New York City.



Courtesy of DHS Science and Technology Directorate

**Rescue workers have a new, better way to communicate that could save many lives.**

With new, interoperable, handheld radios, federal, state, local and defense agencies can communicate using a single radio that operates across all public safety bands, including the VHF band used in many rural areas and the critical marine and mutual aid channels used during large-scale incidents and in search and rescue operations.

One company, Maryland-based Thales Communications, was among the first to respond to the DHS requirement. Putting to work the company’s experience in the development of software-defined interoperable radios for the U.S. military, Thales engineered the software that makes interoperability possible. The result is known as the Liberty Multiband Land Mobile Radio.

“With 2.2 million first responders in the U.S. operating on a wide range of frequency bands with different modulation schemes, achieving our goal meant we needed to simplify a highly complex problem,” said Steve Nichols, a public safety industry expert with Thales Communications. “The answer is software inside a handheld radio that links, in real time, every frequency used by first responders.”

Unlike military multiband radios, Liberty is designed to meet stringent public safety specifications but is just as rugged, with a metal case and the ability to survive an underwater submersion of up to two meters. The radio was tested successfully by DHS at the presidential inauguration and has been used during other high-security events including the Super Bowl, World Cup and Academy Awards.

Now, when the county official managing a local emergency needs to communicate the same urgent message to multiple police, fire and rescue departments on the scene, interoperable radios make the task a one-step process.

Skeptics of this new solution have argued that U.S. counties, towns and cities do not have the budgets or people to buy and manage new communications networks or systems. But according to Nichols, achieving interoperability doesn’t have to be expensive or complicated.

“The day you get a Liberty radio, you can talk to someone on all channels,” said Nichols. “It works right out of the box.”