

Technology Talk

New Developments in Interjurisdictional Communication Technology

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Why can't we talk, or can we? Interoperability remains one of the hottest issues for the new millennium in the public safety sector. We can all agree that our ability to communicate with each other, especially when using disparate radio systems, is essential to properly handling multiple agency responses to critical incidents. However, most of our agencies do not possess the capability for car-to-car radio communications with their neighboring jurisdictions.

All too often, "Better Communications Needed" is the finding of our critical incident after-action reports. However, we never seem to find a solution that addresses this recurring problem. While everyone agrees that the need to communicate is essential, all too often technological limitations and funding shortfalls act as roadblocks to effectively dealing with this issue. Fortunately, there are now affordable solutions available to address our critical cross-band communication needs.

The City of Alexandria, Virginia, Police Department serves as an operational test bed for the National Institute of Justice's (NIJ) Advanced Generation of Interoperability for Law Enforcement (AGILE) program. In Alexandria, a Gateway subsystem was installed to provide direct connectivity among radio systems of neighboring law enforcement agencies with overlapping or adjacent jurisdiction. The Gateway subsystem uses an ACU-1000 Intelligent Interconnect System manufactured by JPS Communications, Inc. The ACU-1000 facilitates cross-band connections of the disparate radio systems and also provides telephone interconnect capabilities. This tri-band switch operates in the VHF, UHF, and 800 MHz spectrums.

The City of Alexandria Police Department is using functional tests and mock operational scenarios to evaluate the capabilities and usefulness of the cross-band switch as part of the department's ongoing operational evaluation of the ACU-1000. Other members of the operational test bed include the Washington, D.C., Metropolitan Police Department, the United States Park Police, and the Metro Transit Police Department of the Washington Metropolitan Area Transit Authority.

During the ongoing testing, several successful cross-band communications links have been established among the various agencies. The project is now expanding its testing and evaluation into training scenarios and anticipates being operational for emergency and tactical deployment in the fall of 2001. The project is also expanding the number of agencies in the Washington metropolitan area that can be connected through the cross-band switch.

Recently, the AGILE Gateway subsystem was placed in its first operational use with great success. Upon learning that the United States Secret Service was tasked with establishing an emergency-only radio channel for the presidential inauguration, the NIJ AGILE team offered its assistance. The subsequent cooperative effort between the United States Secret Service and the NIJ AGILE team resulted in the successful deployment of an emergency-only channel that linked both federal and local law enforcement agencies utilizing the NIJ AGILE Gateway subsystem. These agencies included the United States Secret Service, the Federal Bureau of Investigation, the United States Capitol Police, the United States Park Police, and the Metropolitan Police Department. Other area agencies could have been linked had the need arisen.

According to the Secret Service's after-action report:

The equipment functioned as designed, providing good cross-band transmit and receive audio to all agencies. The ease of operation and versatility was excellent. The [ACU-1000] software provided excellent accessibility to the modules being used for the multiple sites and could be manipulated to isolate sites instantaneously.

In addition to providing a critical national security resource, this operational exercise also provided valuable insight to the NIJ AGILE team on operational deployment and utilization of this technology.

To learn more about The National Institute of Justice's AGILE program and/or obtain technical information regarding the lesson learned and the progress to date, please visit the AGILE Web site at <http://www.agileprogram.org>.