Mobile Communication Gateways for Building Penetration During the Terri Schiavo Crisis

SUMMARY

On March 31, 2005, Terri Schindler-Schiavo died at the Hospice Woodside in Pinellas Park, Florida. Her case was observed internationally, generating many strong emotions relating to life and death decisions. Several weeks prior to her death, hundreds of concerned citizens and many media personnel had gathered in the local area of the hospice.

Pinellas County Emergency Communications Radio Systems Division (PCECRSD) placed one of their ACU-T units in Hospice Woodside to act as a gateway, providing radio communications to and from the inside of the building.

To document the best practices and lessons learned from the Terri Schiavo crisis in the area of communications, the Tampa Bay Urban Area requested that the Department of Homeland Security's Interoperable Communication Technical Assistance Program (ICTAP) assess the use of a mobile gateway as a repeater for building penetration.

BACKGROUND

In late February 2005, Pinellas Park Police Department (PPPD) was tasked to provide protection at the Hospice Woodside to maintain law and order. It was rapidly discovered that the structure of the building prevented officers inside the hospice from connecting to their 800 MHz radio communications system. PPPD runs its own dispatch center but uses seven talk groups on the Pinellas County 800 MHz SmartZone system. For a short time, PPPD stationed an officer near the hospice front door, adopting a work-around by relaying commands to this officer, who then relayed the message outside.
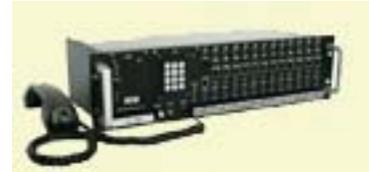
OUTCOME

ICTAP debriefed Gary Dempsey, Pinellas County Emergency Communications Radio Systems Coordinator, who led the installation and integration of the ACU-T. As Pinellas County supports its own 800 MHz Mutual Aid Hailing and Tactical channels, one portable radio (XTS-3000) was set to one of the PPPD talk groups and a second portable (also an XTS-3000) was set to one of the mutual aid frequencies. Both radios were patched together using the PCECRSD ACU-T. The talk group assigned to one of the portable radios was placed inside the building. Their radio radiated three watts, providing nearly full in-building coverage to PPPD officers listening outside. The ACU-T patched the talk group radio to the mutual aid programmed radio, which then broadcast to all dispatch centers in the area using an existing repeater. The PPPD talk group inside the Woodside Hospice was reliably connected to their own dispatch.

Mr. Dempsey said that it took about 15 minutes to tune-up the ACU-T with the two portable radios. One minor problem was noted when the portable batteries were low on charge. The radios would key up by themselves, and then re-key again later. The PPPD Dispatch Center noted this action as did PCECRSD. Once the batteries were replaced with fresh batteries, the key and re-key problem disappeared. For long-term operation, it is highly recommended that the portable radios run off a battery eliminator. Both the ACU-T and the eliminator should be run on an Uninterruptible Power Source (UPS).

The ACU 1000, developed by Raytheon JPS Communications, is a interconnect system that allows patching traffic from 12 different radio, telephone, and satellite inputs using a Gateway Switch. A second ACU-1000 can be added to increase the connectivity to 24 disparate radio systems. The ACU-1000 distributes audio and voice signals from selected systems (radio/telephone) to other systems. This interconnectivity is achieved by detecting incoming audio traffic from different radio systems and enabling push-to-talk on the appropriate radios to which the audio is to be transmitted. The ACU-T is a scaled down version of the ACU-1000 and is portable, in a small package (6.75×6.75×10.5-inch package) and can only handle 6 radio/telephone units.

According to Pam Montanari, Pinellas County, Florida, Emergency Communications, Radio Systems Manager, "This unfortunate set of circumstances was our first opportunity to test the portable interoperability equipment provided by the Department of Justice 25 Cities project. The equipment worked well in this situation and provided the additional communications link from inside the hospice facility to the Pinellas Park Police Department. The system is easy to deploy and can be used for a variety of incidents, both planned and unplanned. Interoperability has many definitions and it may mean interoperability with your own agency through alternative equipment."

Follow-On Efforts

ICTAP documented the ACU-T usage and lessons learned during the Terri Schiavo crisis for the Chair of the Region Four Domestic Security Task Force Communications Committee. The Urban Area has indicated that they will be integrating this use of the ACU-T into their emergency planning.