

Every second counts

Two first responder organisations in the US dramatically improved operational efficiency – and thus their ability to save lives – by implementing state-of-the-art high-tech solutions from Tandberg. Peter Bodak reports



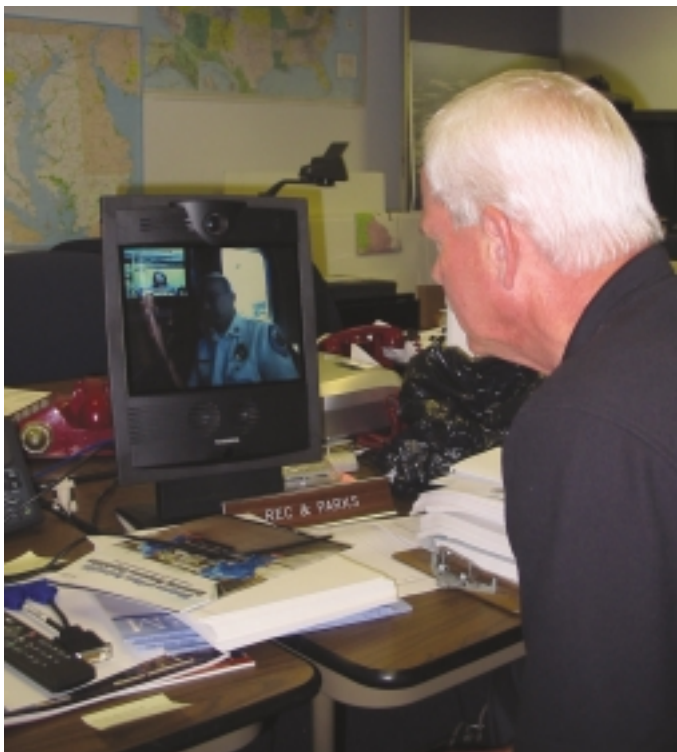
At the ready: West Bloomfield Fire Department

In very recent times, terrorism and natural disasters like Hurricane Katrina have clearly pinpointed the need for reliable communications tools for fire departments to use both in the field and for day-to-day communications. A simple improvement in key equipment can shave minutes from response times, keeping communities safer and saving more lives.

In the past, radio communication was the best and likely only way for thousands of departments around the world to effectively communicate with crisis sites. But a radio can only provide limited

information on the condition of victims and damage to the area. As first responders strive to improve their life-saving responses, using visual communication provides the clear images and personal interaction necessary for accurate assessment and rapid response.

The Anne Arundel County, Maryland Emergency Management Department and the West Bloomfield, Michigan Fire Department both know that visual communications, specifically videoconferencing, can provide an innovative, efficient means to improve communications and address the concerns facing today's fire departments.



Left: In touch: James Weed, Director of the Anne Arundel County, Maryland Emergency Management Department

Below: Action stations: an emergency vehicle at Anne Arundel



Unifying communications

When James Weed, an experienced telecommunications professional, became Director of the Anne Arundel County, Maryland Emergency Management Department, he knew that an integrated voice, data and video (streamed and live) solution was the key to creating a functional, affordable and efficient emergency network for first responders. Creating the vision was one thing, making this happen was another.

Weed understood that this vision of an interoperable communications network must not only interconnect the EOC with regional Departmental Operations Centres (DOC) located at the fire department, police, health department, school system, public works, but it must move beyond the county to the response departments of neighboring counties and the state EOC. This integrated network had to allow the organisation to act as a single department in both emergency and non-emergency situations by enabling the instant exchange of vital incident and administrative information between departments.

Anyone, at anytime from anywhere

To make all of this happen, Anne Arundel leveraged its existing investments in network and communications and added additional, standards-based communications equipment, such as video systems, as needed. For instance, each DOC was equipped with PC's and Tandberg video systems so they are able to send and receive visual communications both day-to-day and in crisis situations. Likewise, the County's Mobile Crisis Communications Unit (MCCU), was equipped with a Tandberg Tactical II, a rugged, mobile video conferencing solution designed for use in field operations. So regardless of the location of the crisis, the MCCU could send and receive

data and live visual images of the situation as it happens.

The County's newly built Emergency Operations Centre, a 9,000 square-foot facility in the heart of Anne Arundel, is a central command center for unified communication and collaboration during a crisis. With Tandberg video conferencing and a host of other communications technologies, this facility is a technology innovation, helping foster creative, cooperative relationships between disparate agencies. By investing in Tandberg standards-based products, Anne Arundel has created a fully interoperable future-proof network, one that will last beyond the next change in technology.

Last year, Anne Arundel County deployed its emergency response team and MCCU to Louisiana to help with the disaster left behind by Katrina. Over the span of three weeks, the MCCU team delivered food, water and safety gear to those in the storm's path. This grueling, sometimes emotionally draining effort was aided by the video capabilities of the MCCU. The Anne Arundel response team used the video units to talk to their families back at the EOC. This visual communication, while not the same as being present, provided the team with much-needed face-to-face time with their families, improving their outlook and boosting their self-esteem. "Allowing our folks



Star of the screen: video-conferencing at West Bloomfield

to touch base with their families was critical to ensure their performance on the ground,” said Weed. “This situation demanded that our guys perform at their very best, and the ability for the team to use the Tandberg solution to communicate with their families was critical to the success of the operation.”

By providing a visual ‘window’ into the activities all of the agencies within its county borders and connecting beyond, Anne Arundel has become a model of how to improve emergency operations with a holistic approach to information exchange and management. Thanks to this approach and the vision of its leaders, today Anne Arundel County, Maryland, is prepared for even the worst disasters.

Solving a communications crisis

In 2004, the West Bloomfield, Michigan Fire Department was facing a communications crisis. With six stations, a booming population, increased call volume, additional training requirements and communication demands, West Bloomfield Captain John Prosygniuk knew that the fire department needed a new way to conduct business to keep his community safe.

A career firefighter, Prosygniuk had seen first-hand the impact the right technology could make on firefighting. The Captain looked to video-conferencing as a way to improve the operation of his department and his communities’ well-being.

Leveraging an Assistance to Firefighters Grant from the US government, the West Bloomfield fire department bought a complete visual communication solution from Tandberg designed to specifically meet their training, interoperability and administrative requirements.

Today, West Bloomfield uses its Tandberg visual communication system for daily briefings, an integral part of delivering information both inside and outside of the organisation. Since initiating these inter-station updates, the department has experienced a dramatic improvement in its ability to make decisions. As well, the department’s personnel have much greater awareness of the resources available at each station. Previously, West Bloomfield’s individual stations were only marginally aware of how other departments operated. Now each station sees the others every day. The teams are tighter, have a greater awareness of each other’s strengths and weaknesses, and are better able to identify and call into the stations with right resources at the right time.

When seconds matter, the time it takes personnel to return to base from an off-site training can mean lives lost. With visual communication, West Bloomfield ensures that its emergency response teams can be right where they need to be in case of an emergency and still receive the critical training necessary to handle crises. This is why West Bloomfield relies heavily on its Tandberg solution to keep their teams trained and ready for action. Using the Tandberg Presenter Module, a trainer can broadcast a training session from any station to the entire department and integrate a range of multimedia for a truly interactive experience. Now West Bloomfield efficiently meets its training requirements without losing its ability to respond to crises at full capacity.

Mobility, High Definition and beyond

Tandberg visual communication solutions are also helping fire departments around the world explore new innovations and techniques in fire safety. Emerging technologies like 3G and High Definition add an element not previously present in video conferencing.

Visual collaboration via 3G enables mobile phone users to access technical experts or communicate critical information quickly during crisis response, directly from the field. This technology is available in European and Asian markets and has made its debut in several cities in the US. High Definition is also poised to make an impact, by making significant improvements in the quality of visual communications and providing fire departments with better visual experience for more accurate assessment and response.

Other tools such as thermal imaging camera technology can, from outside a building or emergency area, enable responders to quickly identify the location of survivors that need to be evacuated, or the location of the fire outbreak. Instead of having to record the image, take back and download it, send it in, and have it translated, emergency responders will be able to transmit thermal imaging as a live video source. Much faster response can be provided – and those minutes can save lives and property.

According to Captain Prosygniuk, “Videoconferencing has allowed West Bloomfield to explore innovative applications that are the envy of every visiting fire chief. Without exception, when they come and see all we can do with the Tandberg solution, they leave saying ‘I want this.’ Now that’s validation.”

At the end of the day, bringing visual communications to West Bloomfield and Anne Arundel was about securing the safety and well-being of the community being served, the employees in sister agencies and those on the ground responding. ■