Building an Emergency Operations Center from Scratch

It’s the dream of just about anyone responsible for setting up an Emergency Operations Center (EOC). And for emergency planners in Chandler, Arizona, it’s a dream that came true when the city built a new fire administration building.

“We started with a blank piece of paper,” said Rob McLeod, Battalion Chief, Disaster Preparedness for the city of more than a quarter million people. “Although we had experience from our old center, we looked at lessons learned by our colleagues in neighboring cities and leveraged the expertise available to us through the Emergency Management Institute.”

“Once we were clear on what we wanted to do, we looked to experienced vendors for creative ideas on how we should do it. And of course, how to do it on a limited budget.”

For the audio visual (A/V) planning and implementation, the city turned to ExhibitOne Corporation – a company with extensive experience in audio and visual design and engineering for both new and converted EOC facilities.

“We originally set up our facility in eight zones so different departments and subject matter experts could be grouped together and share their information,” Chief McLeod noted. “To maximize our space, we put each group, including the command area, on the same level.”

To facilitate “information-at-a-glance” for all groups, ExhibitOne created an environment utilizing both monitors and projectors driven through Extron’s video switching and processing technology. The system allows groups to be looking at multiple information sources, even as they are displaying their respective information to other groups or to the entire EOC. Additionally, teams can call out important information by making on-screen annotations using Boeckeler’s Pointmaker computer video marker. The center’s video display system, which utilizes NEC, Samsung and Sharp monitors, extends into an adjacent situation room. That room is tied into outside resources and information through a Polycom video conferencing system.
Audio management is critical to rapidly facilitating the flow of information within any EOC. The Chandler facility is equipped with Shure desktop and boundary microphones routed through Biamp mixers, which also handle the sound from various information feeds coming into the center.

Controlling the entire flow of information is a Crestron touchpad control. As the center’s A/V master control, the touchpad enables the system administrator to move information around the room and display it in different screen configurations.

Chief McLeod noted that he has come to really appreciate ExhibitOne’s “one button on” configuration. “With the push of one button, everything is operational,” he noted. “That is really nice when we’re bringing the center up.”

Since coming on line, Chandler’s new EOC has been stood-up for a number of local and regional drills and was operational to provide support to a neighboring city hit by a major power outage.

“All of the upfront work with our consultants and vendors has really paid off. While we have since elected to go with six groups rather than eight and have switched locations of some groups, we have made those changes without touching our operational infrastructure,” he said. “We’re moving people around, not cabling or equipment.”

And speaking of changes, that is one of the challenges that Chandler and many other EOCs face. Personnel rotations will often bring in people who are new to the EOC. Chandler looks to ExhibitOne to help with training duties to help ensure multiple people are always fluent in the center’s operation.

“Redundancy and depth are key to the resiliency of any emergency management plan,” Chief McLeod noted.

“ExhibitOne has been an important partner in the creation and ongoing operation of our EOC.”