

Video Security System Protects Communication Lifeline

9-1-1 Center Relies
on March Networks
Technology to Monitor
Remote Radio Towers

There's a lot more to critical infrastructure than bridges, ports and power stations. Located on mountaintops, farmer's fields and skyscrapers across the U.S. are radio towers that serve as a vital communication lifeline for emergency services.

In the absence of a functioning communication system, dispatch centers, police, fire and ambulance services would have a difficult time coordinating a response to a 9-1-1 call. In the event of a larger-scale emergency, the consequences of a communication breakdown could be tragic.

The Columbia 9-1-1 Communications District serving Columbia County, Oregon, is one of many 9-1-1 services across the U.S. that has taken steps to secure its communication network. Based in St. Helens, 30 miles north of Portland, the Columbia 9-1-1 Communications District is responsible for emergency call response and dispatch services in an area covering 680 square miles.

The communication infrastructure linking the call center in St. Helens with police, fire and



“We have been able to capture video of a couple of incidents that have occurred where police wanted the video and have been able to prosecute people for theft and trespass, so we have had the use of the video surveillance system a few times.”

— Steve Watson
Systems and Facilities Specialist,
Columbia 9-1-1

paramedic services consists of seven radio towers on remote mountaintops, timber properties and other locations in Columbia County and in neighboring Washington state.

The Columbia 9-1-1 Communications District relies on its radio communications system to coordinate emergency response for approximately 80,000 calls a year.

In 2004, the Columbia 9-1-1 Communications District received funding from the U.S. Department of Homeland Security to equip its call center in St. Helens with a video surveillance system and, in 2006, the system was extended to cover its remote tower sites.

The sites are 40 or 50 miles away, but dispatch staff are now able to keep an eye on them 24/7 from the 9-1-1 center in St. Helens, said Steve Watson, Systems and Facilities Specialist with Columbia 9-1-1.

“Live video from March Networks’ video surveillance systems is streamed via microwave to St. Helens from each of the sites and displayed both on overhead monitors and on the dispatchers’ PCs.

“The video is transmitted on the same network that we use to transmit voice,” said Watson. “We just dedicate a T1 circuit for

the video. There’s a lot of capacity, so it’s no problem.”

Each site is equipped with a PTZ camera with motion detection capability that triggers the camera to pan to a pre-set location — usually the front gate. Using simple mouse controls, dispatchers are able to pan, tilt and zoom to remotely inspect the site and zero in on any suspicious activity.

The 9-1-1 center uses March Network’s SiteManager client software and Edge Decode Station to display selected camera views on its overhead monitors and PCs.

SiteManager’s panoramic viewing capability allows users to stitch together views from multiple cameras. Individual camera streams are combined by importing them into a virtual canvas and organizing them through a point-and-click interface.

The March Networks Edge Decode Station is a powerful video decoder and display monitor control device that supports up to 64 video streams on analog or digital monitors.

The 9-1-1 center began shopping around for a video surveillance system in 2004.

“The first step was to find a vendor that could provide everything we needed,”

said Watson. “We wanted an access control system for our call center and dispatch building in St. Helens and we wanted video surveillance.

“We interviewed several different vendors. We went out and looked at what they had to offer and talked to the references they gave us. Huser Integrated Technologies of Portland came out very high on our list and we entered into a contract with them.

“It came down to how comfortable we felt with the vendor,” said Watson. “Huser has two or three other clients close to us, so I went out and talked to them and the results were very positive. They, in turn, recommended March Networks.”

Watson convened a meeting of the 9-1-1 center’s security, IT and microwave radio systems suppliers and, together, they came up with a solution for the remote sites.

March Networks 4000 Series hybrid recorders are installed in a locked, weatherproof equipment shelter at each location and integrated with the microwave radio communications system through Cisco routers. The sites are served by road access and electricity, along with back-up power supplied by on-site generators. →

International terrorism hasn't been an issue in Columbia County, but the sites can be tempting targets for vandals and thieves.

"We have been able to capture video of a couple of incidents that have occurred where police wanted the video and have been able to prosecute people for theft and trespass, so we have had the use of the video surveillance system a few times," said Watson.

"I'm very happy with the March Networks system. It's very intuitive and easy to use. I haven't had any problems with it at all." *

Huser Integrated Technologies

Huser Integrated Technologies is a security systems integrator and March Networks Certified Solution Provider in Portland, Oregon. Huser Integrated provides video surveillance and access control systems as well as a wide range of security-related products to customers in the U.S. Northwest from its offices in Portland, Oregon, and Pacifica, California. www.huserintegrated.com

Columbia 9-1-1 Communications District

The Columbia 9-1-1 Communications District (columbia911.com) provides 9-1-1 call center and emergency dispatch services in Columbia County, located in northwest Oregon. The District provides 9-1-1 call-taking and dispatching for all public safety agencies based in Columbia County and provides communications support services for several other public agencies. The service area for the 9-1-1 District totals 687 square miles of mostly mountainous terrain.

