

Rocky Mountain News

Radio breakthrough for cops, firefighters

Technology to link emergency workers

By Ann Imse, Rocky Mountain News
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Denver police say they have found a long-sought solution that will allow officers and firefighters to talk to each other over previously incompatible radios. They demonstrated new technology Thursday that allows instant radio communication among first responders who until now could not speak to each other in critical situations. The new system promises to resolve one of the most frustrating and vexing problems faced by police, fire and other emergency workers.

This wall of radio silence was a huge problem for emergency personnel during the Columbine High School shootings and the Sept. 11 attack on the World Trade Center. At Columbine, teacher Dave Sanders bled to death while waiting for help, in part because responders with one type of radio couldn't talk to colleagues with another type.

"This is the biggest weakness in our communication system," said Steve Cooper, Denver's chief of patrol, during a demonstration of the new solution that connected 13 agencies with three different radio systems. "There are no words to tell you the frustration and helplessness" that officers felt at Columbine when they couldn't communicate, he said. Police have a few group channels for disasters such as Columbine, but they can be overwhelmed quickly by hundreds of responders trying to talk at once. The solution is new hardware and software, installed in Denver, that takes the transmission from one radio system and translates it so it can be heard on another system.

The new system currently has just one channel connecting the 13 agencies, but it is capable of handling 200,000 different conversation groups, said Dana Hansen, superintendent of communications for Denver police. Officers will be able to flick a switch on their radios to join a talk group during an emergency.

Manufacturer M/a-Com installed the \$1 million system temporarily at no cost to prove that it works among the 13 agencies that participated in the demonstration. Denver has received a federal Homeland Security grant to buy it, Hansen said. It will take time and training to hook up all 30 agencies in the metro area to the equipment now installed in Denver, Hansen said. The agencies will have to agree on how and when to use the conversation groups, so they don't overwhelm a single channel in time of an emergency, for example. Hansen expects to be able to obtain federal grants to pick up any additional equipment costs. She would like to see it go statewide eventually. Michael Beasley, the governor's Cabinet member in charge of the state's homeland security section, said he was impressed with the demonstration and supports solving the radio problem in the best way possible.

Ken Anderson, a Navy communications engineer who evaluated the system for the Department of Homeland Security, said, "It looks like it's working." Anderson said nearly every major city needs to solve the problem of incompatible radios. He said he will now be able to tell other cities that there is a viable solution and how much it will cost them.

"I'm really pleased that we're getting something that's affordable," he said. One estimate for changing all the emergency radios in the country to a single system was \$48 billion. The agencies now connected are Denver police and fire; Lakewood, Fort Lupton, Grand Junction and Montrose police; West Metro and Glendale Fire; Jefferson and Clear Creek county sheriff's offices; the Colorado State Patrol and Colorado National Guard; and Evergreen Fire and Rescue.

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