

# RadioSTAT Offers Lost Piece of Interoperability

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<http://firechief.com/hazmat/disaster-management/radiostat-interoperability-200911/>

By Ronny J. Coleman



In amateur radio, a Q-code message can stand for a statement or a question. Q codes are three-letter groups, each beginning with a Q and each with a specific meaning. QSL means either “do you confirm receipt of my transmission?” or “I confirm receipt of your transmission.” Amateurs keep track of QSL communications through an exchange of postcards.

In fact, many amateur radio operators collect these written confirmation cards. A friend of mine even had a QSL from former presidential candidate Barry Goldwater. Not only are such postcards evidence that there has been communication between two amateur radio stations or a one-way reception of a signal from an AM radio, FM radio, television or short-wave station, but they can have other implications.

The idea of sending a postcard to verify communicate reception probably has been around as long as the radio itself. But what does this have to do with the fire service?

When it comes to internal radio communications, we have done a good job of ensuring that the fire service can talk to law enforcement and law enforcement can talk to public works. That is the nature of interoperability. But, where is our channel of communications with the public? It is becoming more and more critical for the fire department to be able to communicate directly with the public during any number of disasters. We tend to think of disaster response as fire-service response, but public response often is necessary. Are we ready to tell the public what they could or should be doing?

If you look at many of the disasters that make headlines, there are some instances in which we would like the public to stay put and some in which we'd like them to move along. But how does the public know the difference? And how much lead time do we give them to make a meaningful decision?

If your department is like most, you probably rely on emergency broadcasting systems to deliver information in the event of a disaster. But now there's an entirely new approach called RadioSTAT, which uses portable emergency advisory radio stations. With this system, portable road signs instruct motorists to tune to a special AM frequency when there is critical information. The signs can be placed in strategic locations and can advise the public on very specific behaviors. Each of these stations can cover up to 75 square miles and they can be moved from one position to another in an emergency.

Ventura County, Calif., has used the system successfully. The county covers nearly 2,000 square miles northwest of Los Angeles. The area is both urban and rural, is dissected by several major highways, and has close to one million residents — nearly one third of whom are Spanish-speaking.

The county worked with Information Station Specialists to design a portable, lightweight emergency radio station. In July 2008, ISS and Ventura County tested the system at a training exercise for public-safety agencies and volunteer-citizens emergency-response teams.

“During the first couple of days of the swine flu event, we were receiving requests from physicians to test patients. We were concerned about bringing these people into our building, where the lab is, to conduct the specimen collection,” said Steve Johnston of the Ventura County Department of Public Health. “With a concern

for social distancing (and to keep our potential cases from infecting others) we decided to have them drive into our parking lot. Then specimens were taken from them while they were in their cars.

“To facilitate the process, we deployed our RadioSTAT [system] along with the information signs,” he continued. “When these people drove into our lot, they were instructed to tune their car radios to 850 AM, where they received all the information on the process and how they were to interact with our staff. This eliminated someone talking to each driver and being exposed to a potential swine flu virus.” The Radio Source, [www.theradiosource.com](http://www.theradiosource.com), offers a more elaborate explanation of the Ventura County exercise.

During public-health and -safety emergencies, the portable emergency advisory radio station can be taken into critical areas. Moreover, those who are responsible for managing the emergency can speak directly to citizens. These systems also can be used to broadcast pre-recorded messages. As situations change, emergency managers can record new messages. And, with the right kind of deployment plan, the technology can cover a relatively large area with only one or two units.

During non-emergencies, these portable radios could be used to broadcast preparedness ideas, fire-prevention messages, climate updates and more. The adaptability of this concept is useful especially in a rapidly changing environment.

Emergency broadcast systems have worked fairly well but they lack one of the most critical aspects of good emergency communications — real-time application. They usually take longer than we anticipate and they depend on other parties to relay the information. Emergency broadcast systems are great for very-long-term activities but aren't as useful in the short term.

The stronger we are as public-safety agencies in monitoring and controlling the public during emergencies, the better off we will be. There is even a national organization that is looking for partnerships in this arena. The National Voluntary Organizations Active in Disaster was founded in 1970 after Hurricane Camille. Members include national nonprofit organizations whose mission include disaster preparedness, response and/or recovery. Reportedly the organization has chapters in 55 states and territories — the heart of any disaster response. The fire service needs to play a role in the development of similar concepts. To ignore the concept is to be passed by as it is adopted by mainstream society.

I remember as a young child sitting on the back porch of my grandparents' home listening to baseball games being broadcast on radio. On many a summer night, I sat listening to the theme song of the Lone Ranger and the Green Hornet as stories were woven in my mind by the magic of radio. Today, people watch their televisions or browse the Internet to do the same thing. But we need more. What we need is a better channel of communications that goes *directly* to our potential customers — and that is what this technology offers.

It is up to the fire service to engage in this process. There is no national thrust at this time to make this move, but it is definitely a possibility. For less than \$15,000, your fire department could build the final bridge in interoperability — between the fire service and the public we serve. The only question I have is whether we want to play the Star Spangled Banner at sign off like they did in the good-old days.

One of the other amateur-radio codes that I learned from that friend of mine regarding messages was the old standby, CQ, or “calling any station.” It was used when the air space was really quiet and my friend was just out there trying to find out if anyone is listening. The next time we have a disaster that requires either an evacuation or a shelter-in-place scenario, hopefully we won't be talking to dead air.

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*With more than 40 years in the fire service, Ronny J. Coleman has served as fire chief in Fullerton and San Clemente, Calif., and was the fire marshal of the state of California from 1992 to 1999. He is a certified fire chief and a master instructor in the California Fire Service Training and Education System. A Fellow of the Institution of Fire Engineers, he has an associate's degree in fire science, a bachelor's degree in political science and a master's degree in vocational education.*