

by R. K. Leef

Missing The Boat On Communications

Editor's Note: This month we give the keyboard to R.K. Leef (www.rkleef.com) for a special editorial that deserves your attention. As you read this, please keep in mind that we're now about two-and-a-half years post 9/11.

Bob has authored several petitions to the FCC relating to GMRS, FRS, and license fees. He has founded four radio organizations, including the Radio Communications Monitoring Association. He's a former communications responder for the Red Cross on national disasters and a 35-year radio volunteer in his California community. He has also spearheaded three collections of slightly used two-way radios, taking them to rural fire departments in Mexico.

The recently published *9/11 Report—The National Commission on Terrorist Attacks Upon the United States* makes great reading, especially for people interested in radio communications as we are. The following are just a few of the notable comments I have on the report. I ask for your thoughts.

The Port Authority police were poorly prepared, the Commission found, with officers responding from the agency's airports, tunnels, and bridges, but unable to find a common radio frequency or a command post for instructions. The Commission said that there had been "a lack of communications and coordination among responding agencies" and "information that was critical to informed decision-making was not shared among agencies." Technical difficulties with radios were only one factor that slowed the communication of orders.

Government Communication... Or Lack Thereof

Military and FAA leaders at senior levels had no effective communication with each other. In the fire department, the system was overloaded, commanders had difficulty communicating with their units, firefighters were tuned to the wrong channel, and others were without radios, according to the Commission.

It was recommended to make homeland security funding contingent on the adoption of an incident command system to strengthen teamwork in a crisis, including a regional approach. Also, it was recommended to allocate more radio spectrum and improve connectivity for public safety communications, ***and to encourage widespread adoption of newly developed standards for private sector emergency preparedness, since the private sector controls 85 percent of the nation's critical infrastructure.*** This is amazing!

Sometimes communications people don't communicate very well. Besides this magazine, do you also read *Mission Critical, Mobile Radio Technology, Homeland Defense Journal, 9-1-1 Magazine, APCO Bulletin, Association (Canada)*, or other similar publications? You will have noticed one thing in common regarding two-way radio. It was also the same thing heard after the 9/11 disasters, and heard in just about every post-event critique anywhere: "we had communications problems." In many cases this amounts to one agency or organization not being able to talk to another at the scene of a large-scale incident because of being on different frequencies.

Interoperability (actually the lack thereof) is the buzzword of the year. In an effort to overcome the problem, some new common frequencies are being established, protocols are being instituted, and some other ideas are being put into effect. What does this have to do with "popular" communications? Maybe we "ordinary" communicators could learn a lesson here. And maybe radio manufacturers could also learn an even more important lesson.

Interoperability Still Lacking

There are thousands of business licenses, agency licenses, and organization licenses issued by the FCC. Each of these accounts for numerous units, many on the UHF band from 450 to 470 MHz. Mobile and handheld models have been designed with *them* in mind. But wait, there's so much more! Just below 450 MHz is an amateur band. There are about 600,000 licensed hams in the United States. And within the 450- to 470-MHz band there are 54,188 GMRS licenses, many with multiple radio users. How about some interoperability here when we need it?

Lots of radio people I know are hams, have a GMRS license, and also use their handhelds and mobiles for business or belong to an agency or organization using a UHF frequency. Yet, few mobile units are designed to let the public user operate on all the frequencies he or she *could* use. *AND*, we're not talking about occasional emergency use, but daily communications that could be a great convenience.

A sample check of mobile radios available from manufacturers shows this interoperability is seriously lacking in most cases. For example, most mobile models are FCC certificated for Part 90 (business, etc. radio services) from 450 to 470 MHz, but not for Part 95A (GMRS)—right in the middle of that band! The few that are usually don't also include the amateur band from 450 down to 440 MHz that should require no further FCC certifications. If there are any radios that make it this far, some don't have the specifications to allow them to be used as a base station—as is, right out of the box—and hardly any have front-panel user-programmable CTCSS/DCS. While all models probably could easily meet these requirements, only very seldom does the manufacturer include these desirable features. Note: units not certificated at 2.5 parts per million (PPM) may still be used as base stations for GMRS if they are "maintained" within a frequency tolerance of 2.5 PPM.

Yes, manufacturers are missing the boat in making a moderately priced mobile radio that is marketable to a wider market. Maybe they never heard the advice "all aboard"?

Progress?

At issue deadline, we just found out about a new UHF mobile scheduled for delivery at the time this issue is to appear. It's offered by one manufacturer, Tekk, and should have almost all the desirable features, be user-programmable for tone, and sell at a consumer price! ■