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From: "Steven J. Makky, Sr., ENP"  
Subject: AYR's Litany on Ham Radio (long, hopefully worthwhile)

I know this is a while since the thread has had comment, but I'd been tied up over Thanksgiving and had to jump in and add my two cents' worth. I've been a ham for 26 years now. That's a few years more than I've been involved in public safety activities of one type or another.

Working with public safety organizations is not an entitlement and simply having a license doesn't make anyone uniquely qualified to serve these organizations. As others have pointed out, a missing dimension is specialized training. The amateur response of years ago to most situations (simply start a net) is irrelevant without supportive actions and many responders consider unfamiliar personnel a liability more than an asset. Indeed, if a support person is unfamiliar with scene operations, the person they are shadowing is now responsible for not only his or her safety, but the safety of the individual they are with. So, for the past few years I've been evangelizing the need for adaptability in amateur radio. The ARRL training is of paramount importance - but it doesn't stop there. Many amateurs don't know the difference between "public service" and "public safety." It's not in the books, so you have to write it down and understand the differences - public service is performing a service for public good. Public safety is carries that further. It implies an acute situation or a situation which is planned, but has the potential for mass casualty if things go wrong. People may get hurt and people may die - and that includes the people who are responders. Beyond the training the League makes available, someone who finds himself out in the street with an "HT" needs to be aware; aware of things like hazardous materials and explosives. I have a certificate for working the New York City Marathon in 1987. Years before that, I worked a "mini-marathon" in NYC's Central Park. Back then I had fun and so did the spectators and competitors. But in a post-9/11 world, no one knows what will happen next and one can't allow one's self to slip into a complacent state of mind.

Today's 'of service to public safety' ham also needs to be versed in 'how the other boys play the game' - Incident Management. They need to develop internal mechanisms that drill down to a central point of contact and chain of command. There needs to be periodic briefings to understand the goals and objectives of each operational period, and, there needs to be after-action analyses of what happened and how they could improve in future evolutions. We typically don't do much of that. Not even in many public safety agencies. Most importantly in this line of thinking, we need to develop accountability. That means WE STOP FREELANCING AND SOMEBODY KNOWS WHERE WE ARE AT ALL TIMES AND CAN DETERMINE IF WE ARE OKAY OR NEED HELP. Don't feel bad, though, because some public safety people have trouble with this concept, too.

Other things hams need may be training in what to do if you have to put your radio down and take care of someone who is injured. CERT is a great program overall and should be coupled with CPR and the operation of an Automated External Defibrillator. And, hams can't show up in a sweater and loafers. They need "PPE" (personal protective equipment), which is as valuable as the electronic gear they may be bringing with them; certainly MORE valuable to the person who is wearing it.

Worst yet, I said it above - you can't expect to show up and be put to work if nobody knows who you are. The dimension missing from most of this equation is that HAMS MUST DEVELOP A PREESTABLISHED RAPPORT WITH THE ORGANIZATIONS THEY EXPECT TO WORK WITH!!!! Sadly, in some communities that means going beyond saying "hello" to local emergency managers, and going directly to police, fire or EMS agencies to demonstrate their capabilities. I say that with great reservation because I work as a professional emergency manager, but in the past six years I've been doing that, I've noticed a significant drop in relevance as "homeland security" initiatives have become police, fire and EMS initiatives and have largely ignored established emergency management agencies, relegating them to the same secondary status many amateurs perceive of their services. Hopefully that's not the case in your neighborhood, but by us, politicians removed the free-standing departmental status of emergency management in favor of making it a "division" of the health department, an organization that developed a high profile during the Anthrax scares immediately after 9/11. This coming year sees a truncation in budget where some tough choices in operational capabilities will have to be made. The failure of one organization to adapt quickly led to its summary demotion in importance.

To underscore this need to adapt or die, fire departments died a long time ago, too. If you don't believe me, ask renowned fire chief Alan Brunacini, of the Phoenix, AZ fire department. He casually described his organization as (and, I'm paraphrasing) 'an EMS department that happens to fight fires.' Many fire departments have taken the foray into EMS and some even into emergency management because they have the need to adapt. Sometimes it's difficult to justify the FTE head-count and specialized apparatus when you only have a handful of big fires a year. But, if you go out on several thousand EMS calls or are active in planning for a major event or in anticipation of risks within the community, the resources are easily justified.

The other side of this coin of disenfranchisement is the purposes of ham radio. I saw technical innovation until the mid 80's when young upstarts in the ham world went "digital." AX.25 was popular and many talented people went on to develop packet-switched protocols that were used in many external telecommunications applications. Then it became venerated, just like CW. Don't get me wrong. Somewhere in the garage is a button that said, "No Code, No Code, Rah, Rah, Rah. Three dits, four dits, two dits, dah." I took my extra at the New York City FCC field office in the days before volunteer examiners and had to endure 20 WPM CW. But, I digress. When we venerate something, we stop altogether. There are extensive 1200 baud networks all over 2 meters. But the need within the communities we intend to serve is exceeded and the present state of the art is delivering 19.2 k into emergency vehicles. With an aggregated 150 kHz 700 MHz data channel, that may someday be DSL level connectivity into emergency vehicles over a wide area - but we do 1200 baud with a smattering of 9600 baud for some very adventurous individuals. To my esteemed colleagues who think Cmdr. Bruninga (WB4APR) discovered AVL (automated vehicle location) with APRS, this simply isn't the case. I agree that APRS refined AVL to some extent and made the concept widely available - and Cmdr. Bruninga's contribution to amateur radio has been significant, but AVL existed before APRS and even before a GPS constellation. In the mid 80's NYCEMS was experimenting with ETAK mapping and ambulances that had dead-reckoning

location technology. Going from the common 1200 baud to PSK 31 has venerated the arcane. Sure it will "get through" as a mode of adversity, as CW has proven, but it's getting its butt kicked by modalities of significantly greater throughput and service potential.

Part of this "death" has to do with hams themselves; it's not all on wireless companies. I've been told by other non-ham colleagues that working with some groups of hams is like herding cats. Hams who dedicate the facet of their hobby (yes, it's a hobby) to the service of public safety agencies must restructure themselves away from being "clubs" into being response-ready organizations. This involves coming together to develop not only a president and secretary, but a CHIEF. It's not about running a meeting and collecting dues to put a talking controller on the repeater, now it's about STOPPING PETTY BICKERING, AGREEING ON SOMETHING and THEN SELECTING A LEADER. I've seen so many great initiatives evaporate because someone got pissed, or had their egos stomped on and then took their toys and went home. A lesson I learned early in ham radio was that most successful repeater organizations were benevolent autocracies rather than clubs. The clubs I was a member of were riddled with more experts on Robert's Rules than people who were willing to do things. With all of the resources available, it leaves me wondering how we hams could not have developed a broadband urban intranet, or intra-urban OC3 network - and then I think of the guy who was part of a linked repeater scheme who wanted a different "courtesy tone" on his repeater and took it off the air because he disagreed with the rest of the group. A service organization is not a club; we've all seen disastrous consequences when an organization, such as a volunteer fire department places the social aspects of membership above the commitment to training and response. This is exactly the same thing. The last thing anyone wants is a call from a chief officer in their community asking, "who are these bozos you sent over?" Get into a response mode. Use that talking controller to send alert paging tones and see if you can make it out the door in time to make it to an incident in a safe, but timely manner if called. Take as much care of your PPE as you do of your "grab and go" radio box, have personal items like medicines, food and appropriate clothing if you are "stuck" in a place for a while, and know that things may change very fast and you may need to rely on your training and senses to get you through. If you have no training, you shouldn't be there.

Finally, there needs to be reasonable expectations on the part of the agency served and those who provide the services. Next time you run into a Police Officer, Deputy, EMT or Firefighter, ask him or her if they know anything about hams or amateur radio and, if something major were to happen, what they'd be doing at the incident. Wait for the cricket noise. That question is usually followed by a lot of silence. Likewise, ask a ham what their perception of the needs of a public safety agency will be at a major incident will be. There will be references to TV shows from Adam-12 to Third Watch... none of which may be relevant or accurate. THERE IS ONLY ONE WAY TO FIX THIS: THAT IS TO DEVELOP A PRE-ESTABLISHED ONE-ON-ONE RAPPORT BEFORE SOMETHING HAPPENS. Here's the proof - in 1999, the local office of the FBI pulled together public safety officials in the St. Louis area for a brief slide show and a big barbecue. I didn't get it at the time (I don't get a lot of things the first time I see them), but, in retrospect, it was a stroke of genius. All of these officials had never met each other before. They may have known names, or seen each other in passing, but by placing

them into a social situation, they all had the opportunity to network and get comfortable with one another BEFORE they had to work with each other under duress. It made people approachable. Some of the sidebar discussions included, "we have this..." or "we can bring that..." or even "no, nobody around here has something like that." Amateur radio has a lot to offer and trained, aware amateurs have a lot to bring into a situation, but they are not the cavalry. Responders need to know what amateurs "do" and how these resources will be of benefit to them, and then have a role that can be fulfilled before anything ever happens. Once something happens, and you show up without this pre-established rapport, there will be unrealistic expectations on both sides. The guarantee here is that if these expectations are not fulfilled: 1) the agency will never call again, and, if they do, 2) the amateurs won't turn out for the event. All the more reason for everyone to have realistic expectations before the need.

I am a ham (obviously), and I am a World Trade Center responder. I was there within the time period of two to four weeks post-incident as an intermittently appointed telecommunications specialist supporting DMAT and DMORT teams (disaster medical assistance and disaster mortuary operational teams). Although I made it to "the Pile" several times, I spent most of at least 12 hr. days for those two weeks working on various support systems and, my personal frustration was that much of what I did was program and work with "donated" wireless transceivers for "direct connect" use within the scope of the incident. Like most people who went through a traumatic incident, I came back changed. I was disappointed that I couldn't "do more" with what I brought to the table, wishing (still) that I had been digging, instead. And, I pondered (maybe too deeply) about the wisdom of foregoing autonomous systems for one that was revenue driven in an ad-hoc situation where existing local resources were overwhelmed. As frustrated as I was, a friend reminded me that WWII could not have been won without that supply sergeant who made sure the troops had the resources to get their job done. The decision to use those was beyond me (and still is), but the need to perform what I ended up doing still existed.

If we amateurs are to remain salient, we need to regroup and reorganize. Then we need to train and educate ourselves beyond simply having a ham license. We need to be aware of the environment our "served agencies" work within under normal conditions, then work with them ACTIVELY on developing realistic support mechanisms for situations where they are overwhelmed, then we need to be team players - along with them - so that our mutual interaction is choreographed. We need to be able to stand alone without being a liability and sometimes may have to put the radio down to help do something. And, we all need to work together. If we can do that, then amateur radio is not dead.

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