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### Ham Radio - Enriching Public Health...and Life



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Slightly more than a year has passed since I left Sacramento County and became Health Officer in Lake County — a rural county with roughly 65,000 residents. Sacramento County Public Health provided me with invaluable training and experience, which enabled me to hit the ground running. What followed was the discovery of an amazing community that will forever enrich my life.

Lake County is geographically beautiful but resource poor when it comes to government and business. It contains the largest natural lake that is wholly in California and the lake is surrounded by a variety of tiny communities. Like many Lake County residents, I live in a remote rural area and part of my commute is on a bumpy dirt road. Power and telephone outages are not uncommon and cellular telephone service is spotty at best.

### Venturing into Ham Radio



*The author at her base station.*

I quickly concluded that getting a ham radio license was a good idea — both for personal safety and as part of our emergency public health response. Little did I know what a wonderful decision that was — on many levels.

Within a few months, I successfully obtained my Technician Class entry level amateur radio license. I learned to communicate with ham operators at local hospitals with whom we conduct quarterly drills. A few hundred dollars later, I had a professional quality mobile radio with government and ham channels

complete with a three-foot antenna proudly displayed from the roof of my car. I also became acquainted with other local ham radio operators.

Ham radio operators are the most diverse people you will ever meet — all joined by the common bond of their love of amateur radio. Our local group consists of musicians, mechanics, machinists, information technology personnel, nurses — you name it. They are generally energetic, industrious, and communicate with each other constantly. If you need anything, they will be there.

When I announced that I wanted to install a base station (a radio in a fixed location at my home with a permanently mounted antenna), local hams immediately went to work. They came to my house, advised me on where to locate my antenna, welded the necessary mount and conducted a veritable equivalent of a “barn raising” event. After a few hours of frantic activity, I had the best amateur radio station operating out of the tiny town of Upper Lake.

Later, when I decided I wanted to add a high frequency antenna for access to global radio transmissions, I authorized the local vendor of radio equipment to provide materials to designated local hams at my expense; they built and installed a 120-foot wire antenna suspended among the trees on my property.

### **Join by Coming to Breakfast**

That was just the beginning. The real treasure was the extended family that I had just acquired. Although there is an official Lake County Amateur Radio Club (“LCARS”), there is also an unofficial radio club. This group has designated “officers,” but thrives on a deliberate lack of structure. If you show up for breakfast, you are a member. This group meets faithfully and enthusiastically every Saturday morning at 7 a.m. at a local diner, where the waitress knows us all by name and remembers what we like to eat. Attendees look forward to breakfast as the highlight of the week. There is good humor and fellowship every time. It is our “eyeball” time with those we talk to on the radio.

Until our group’s Google account memory filled up, each weekly breakfast resulted in the posting of more than 30 photos of attendees. Despite its lack of structure, this group productively helps new hams get on the air and gives them a big dose of encouragement. The group has holiday gatherings and barbecues, and hosts an annual “fox hunt,” which is a very fun treasure hunt event in which we seek out and find a concealed interfering transmitter signal by using directional radio antennas.

Ham radio is inherently positive. The local hams call each other up every morning, starting as early as 5:30 a.m. They celebrate the sun coming up and the fact that they wake up each morning. If someone doesn’t call in as expected, concern about their wellbeing arises. That generally prompts a telephone call or a stop by their house. The more senior members of the group who live alone feel greatly reassured by this.

If a ham operator does not appear at the Saturday breakfast as expected, the group becomes concerned. In Public Health emergency preparedness, we talk about “vulnerable populations.” Ham radio takes care of its vulnerable members.

As the local Health Officer, I glean a great deal of information from ham radio. When a tractor-trailer went into a local lake in the wee hours of the morning, I heard about it first from my morning ham radio group chatting over coffee. By the time I got to work, I knew I had a hazardous materials incident in progress.

The group shares information about traffic delays and weather. We, who reside on the top of various hills and mountain peaks throughout the county, share information immediately about the first snow fall, the rain and anything else of interest. We talk about everything and nothing.

Ham radio operators keep each other company by chatting as they commute to and from work and assure their safe arrival. Children check throughout the day on elderly parents who are also ham operators.

When I conduct my quarterly radio drills with local healthcare facilities, hams from my breakfast group call in as guests, showing their support and availability for emergencies. As the result of the morning “chatter,” I have contacts all around the Lake. I know who they are, where they are, their capabilities, and the radio frequencies needed to reach them. I know who I can rely upon to relay messages and how to go about it. So, our daily greetings substantially strengthen our emergency response.

The local ham community also conducts regular evening “nets,” which are organized roll calls of hams who support local emergency response. These nets occur every Monday and Wednesday.

## **Helping Gunter Move**

I can't describe our local ham community without mentioning “Gunter,” a local ham operator that I first heard as a very weak radio signal coming from Lake Pillsbury, a remote part of Lake County accessible via a good two or three-hour drive, much of it on unpaved road sometimes passable only with 4-wheel drive. Gunter turns out to be an elderly man who lived in a recreational vehicle lacking telephone service. His sole support came from the ham community.

At one point, he fell and sustained an injury that needed care in a local skilled nursing facility (SNF). There, he continued to communicate via a portable radio. When we decided to include SNFs in our emergency communication drills, I suggested the facility use Gunter as its representative. What a delight — Gunter represented the facility perfectly! Perhaps SNFs should more often consider the valuable resources available in their own residents.

Eventually, Gunter recovered from his injuries and arranged an apartment in Senior Housing. Over the air, I heard that he had signed papers for his apartment, and I inquired about when he planned to move there. The answer was immediately, despite the fact that he didn't have a single piece of furniture — not a chair to sit in or a bed to sleep in.

Many of our ham “family” members had already anticipated the need to set Gunter up with a household, and we quickly moved into emergency mode. Over the air and within a few hours, we coordinated to get a mattress and various household items to Gunter's apartment and set him up with basic necessities. As a true “ham,” he was preoccupied with how he could install an adequate antenna outside his window!

As an aside, I believe that ham radio is an excellent tool to prevent dementia. To be an amateur radio operator, it is necessary to memorize both names and call signs of contacts. For those who subscribe to the concept that one must “use or lose” mental faculties, ham is an ideal form of mental exercise.

## **Public Health Surveillance**

Ham radio is also an unexpected Public Health surveillance tool. During recent H1N1 events, I learned via radio chatter of cases of pneumonia and other influenza-like illness. I followed up on those cases to rule out H1N1 and chuckled at the idea of conducting public health surveillance via amateur radio!

In Lake County, the chemistry of our local ham operators is delightful. Radio etiquette requires a focus on the positive. Nobody likes to hear negative conversation on the airwaves. That positivity translates into actions off the air. The group encourages its members and celebrates their successes.

At a professional piano concert involving the performance of a local ham operator, a sizeable section of the audience was filled by local hams, who cheered for the performer and chattered between vehicles while traveling to and from the event.

On Valentine's Day, the same hams and family members filled a local restaurant and made sure that the tip jar for that same performing pianist was filled; the pianist used a portion of the tips to fund a local ham radio project.

Hams support each other through good and bad times. They support members when elderly parents and spouses move through the process of dying. When those hams transition to "silent keys," the entire ham community expresses its sympathy and pays its respects over the air. The arrival of numerous vehicles equipped with visible antennas at funerals has a profound and positive impact for the grieving family. The local ham group has supported its members through divorces, unemployment, premature births and other difficult times. It is a true community in the most ideal sense, valuing the company of others over all else.

As Health Officer for Lake County, I have quickly developed a huge affection for the people who live here and I attribute this to ham radio. Never before have I found an opportunity to enjoy so many and varied community members as "family."

The benefits to emergency preparedness are tangible, but the benefits to human existence and community spirit are immeasurable.

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