

[Why our area has its unique political and religious attitudes.]

After the most wonderful time of the year and the winter solstice, people familiar with our area begin the preparation and anticipation for spring storms. There is a reason the area has the moniker "Tornado Alley". This column will take a decidedly contemporary application of our weather history and taking situations in our own hands, which absolutely influences our attitudes.

We are fortunate to have Travis and Stacia with their colleagues at other stations as the foremost weather meteorologists perhaps in the world. But radar still cannot replace eyes on the ground. How do the weather service and storm-spotters communicate? Expand that, what is the one communication system that responds to every major emergency? What do you know of this radio service?

Because communications do not stop at borders, international agreements control operation of radio transmitters. Commercial radio, television, WiFi, cellular service, and radar are precisely controlled, regulated, and monitored. Since the inception of long-range radio by Guglielmo Marconi, agreements have reserved a segment for experimentation and to try different technology. That segment is the Amateur Radio Service, to most people 'ham radio'. The operators must still pass examinations to assure no interference, but the libertarians have been able to keep other activities within the bands at the sole discretion of the operators.

Why would international governments allow such operations? Two major reasons are paramount. Remember the experimentation component? Much of the understanding of radio transmission and the technology develops and expands within the Amateur community. Second, since the radio operators are independent, they invariably are able to provide communications when no other methods are available. Frequently amateur radio is the first or only communications after disasters.

Unlike more densely populated areas, the widely scattered people of this region are relied-on by the National Weather Service (NWS) to provide spotting of weather and reports of damage. So that everyone involved is hearing the progression, amateur radio is the communications vehicle. The NWS provides spotter-training in February and March at various locations around the area to anyone interested. Obviously, most of these participants are hams.

A point of clarification is important. Storm-Spotters are observers. Storm-Chasers are very different. They are weather-professionals in a very risky business. Both authors have taken the spotter classes numerous times, because there is always something new to learn.

Because of the disaster response and communication capability, a couple of us seasoned ham operators were asked by our church group to provide ham radio training to those interested. We were very surprised at the response. Comments included, "I have always wanted to do that but did not know how" to "I want to have the capability to hear the weather spotters and what is going-on first hand" to "I want to play with the technology." All this has to do with the application or lifestyle.

Someone queried "Hams don't often build radios anymore, what do you do?"

Three aspects determine the level of activity for hams: the technology or equipment, the mental exercise or gymnastics, and the lifestyle or what you do with it.

Technology has progressed at warp speed. In the good ole-days, the telephone was hooked by wires. You could talk locally, but across the county was a long-distance call with exorbitant rates. No other devices were allowed on the phone line.

Similarly, the television was a big piece of furniture with a black and white screen connected by a big antenna to access the three local network stations. Now a television is a screen with connections to Roku, Apple TV, and devices from Blue-ray to sound systems.

Similarly, in days of yore an amateur station was a room full of equipment with a huge array of antennas. Now, the transmitter / receiver of amateur is a wee-box. But myriad devices are often connected from digital communications and Raspberry Pi, to every computer idea and software one can imagine. Hams are as likely to experiment with a keyboard as use a soldering iron.

We may seldom build the box anymore, but we can build and communicate with anything else imaginable, if we want. There is no "you-got-to." Remember it is doing what you want, which is the definition of experimentation.

Now, my local rig is a 6"x8"x1.5" box with touch-screen and a 36" antenna in the attic. The mobile is similar with a seven-inch tall magnetic antenna that blends with the XM-radio antenna. The cost does not have to be stratospheric. The most common hand-held costs \$27 and a full blown, top-of the line local network system is about \$500.

Who is involved? A number of years ago, I was in my office doing morse-code, which is no longer required. My lovely, very non-technical, but artist wife came in to ask if she could do that? She thought it musical and creative. Do you suppose I said "no, this is a guy thing?" Typically, in short order, she was better at it than I was. I then suggested that she should get her ham license. She responded, "Okay, that should be fun, tootle doo". So, we prepared her and in four weeks she took her exam at a local club meeting. Bah humbug. She only missed one question.

Our classes have had 80-plus year-old great-grandfathers to 30-something working-mothers, and 14-year-old boys, in the same group as practicing-engineers. We have taught blind, physically impaired, and other challenged individuals. If you follow the instructions, you move from first introduction to a licensed ham in 30-days, or 'A month and done.' Over the years, hundreds of my students have proven it works. That pace is in time for this year's storm season, if that sounds interesting.

What other exercise provides such cross-generational and cross-cultural activity on an equal footing, at the same time providing service to the community and themselves? That is the Oklahoma spirit.

VHF/UHF station with battery back-up, photo by Rosemary Durham.