President's Corner
November 2008

Greetings! This month I'm involved in two different projects. On the surface they may seem to differ widely, but there's a link.

Several months ago, at the local mineral & gem show, I picked up a sample of galena. For those of you for whom the word "galena" doesn't invoke instant recognition: this is the basic component of old crystal radio "cat's whisker" detectors, used before the invention of germanium diodes (or, for that matter, tubes!) to demodulate AM signals. Since childhood I'd been interested in fooling around with a cat's whisker, but never actually saw one outside of a museum display. So I figured some day I'd fashion my own. Why? I don't know, just curiosity & the desire to explore interesting natural phenomena, I guess.

A few days ago I found myself with a couple of spare hours, so I hunted down some hardware from Home Depot's plumbing section & hunkered down in my shop to fashion my cat's whisker. My wife happened to hand me a small, nicely finished piece of wood a few days before, which looked to be perfect for a base. I got a couple of terminal posts at Unicorn Electronics (lucky for me, within walking distance of my house), and Voila! One beautiful looking detector. Now I just have to build the rest of the radio. I found a fabulous resource for copies of crystal radio plans out of old magazines and government bulletins (at www.crystalradio.net), so when I get a few more hours I'll start winding some coils around oatmeal boxes or toilet paper tubes and try out my detector. (Anyone have an old set of high-impedence headphones to loan? I have one of those 1960-style plastic earphones, but I'd prefer a setup that's more true to the era.)

My other project involves a growing interest in decoding satellite signals (using a receiver hooked up to a computer). I discovered the ability a couple of years ago to decode weather images from the "APT" satellites which frequently pass overhead. My receiver doesn't have quite the bandwidth to decode them clearly, but I found it exciting nonetheless to receive signals directly from space (the thrill might seem trivial to those of you with satellite TV or Sirius/XM receivers…and yes, I have a GPS unit which also receives satellite signals, but there's just no challenge involved!) More recently I discovered the ability to receive OrbComm satellite telemetry data using the same receiver (my trusty Icom R7500), but the strings of numbers that result aren't as interesting.

Then a couple of weeks ago I lent a hand to Drew Deskur (KA1M; his father "Kaz" was an amateur satellite pioneer) to adjust some amateur antennas up at the Kopernik Observatory, and Drew demonstrated for me how easy it was to receive signals from the International Space Station. As it turned out, space tourist Richard Garriot (W5KWQ), who made millions in the video game industry, was aboard, and was sending out slow scan TV images on the 2 meter band (145.800 MHz). When I got home I not only decoded some images, but also caught some voice communications.

From turn-of-the 20th century crystal radios to 21st century satellite communications – could hardly be a bigger jump, eh? But the fact is, these are just two aspects of the amazingly broad diversity of interests that are encompassed by our amateur radio hobby. I love talking about these kinds of things with fellow-minded folks, so I hope to see a bunch of you at our next general meeting.

73 de allen lutins KC2KLC