

Ham radio - continued from page 1

The FCC requires by law that hams are to avoid interfering with appliances and electronics of their neighbors. Mitchell noted that the ham community in general is quite good at self-policing, and he was attracted to the unspoken code of conduct that existed when he first entered the ham community.

"It's a fraternity, and you treat one another with respect on the air," said Mitchell.

Arguably the biggest change in radio since Mitchell began as a ham was the shift away from vacuum tube technology towards the use of transistors, which, compared to their predecessor, were more robust, took up less space and generated far less heat. Radios today also possess features that make them much easier to operate.

Although radio began using Morse code, there have since arisen a wide variety of new forms of communication, along with a variety of niches and sub-hobbies within the ham community. When hooked up to a computer, there are voice modes and virtually limitless forms of digital communication. Some hams like to send signals into space. EME, or Earth - Moon - Earth, otherwise known as a moon-bounce, is when a signal is bounced off the surface of the moon and then returns back to

them on Earth. Ham's will also send signals to astronauts aboard the international space station, some of which are hams themselves.

QRP operations, or reduced power operations, are also popular in the ham community, where the goal is to make communications using as little power as possible. As a reference, Mitchell will typically use around 100 watts when operating his equipment, whereas the average QRP operator uses less than 5 watts. Mitchell himself enjoys this niche as well, once taking his portable QRP radio with him when he went backpacking.

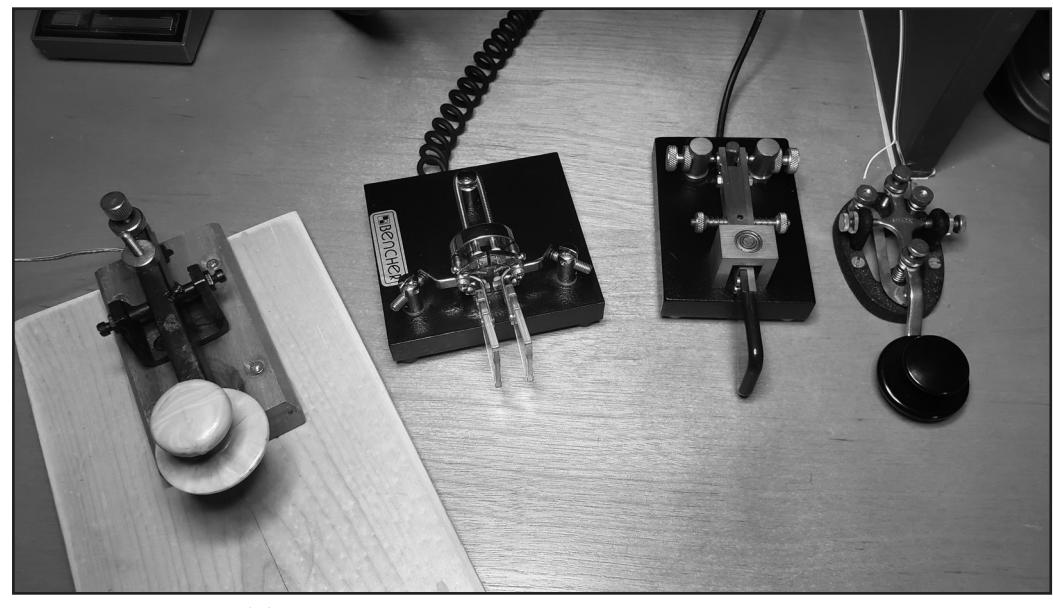
Contesting is another popular ham activity, although not one Mitchell often participates in himself. Fast contacting is when the goal is to make as many contacts as possible in a given amount of time. High speed telegraphy, or HST, is another popular form of competition in European countries like Russia; however, it has yet to catch on in the U.S.

Another sub-hobby within the hobby is the collection of QSL cards, QSL being a confirmation receipt of contact with other hams, and are akin to postcards. These cards are also a way for fellow ham's to confirm contacts they have made over the years. Over the years, Mitchell has collected many cards from across the

globe, many of which he acquired back when he first entered the hobby. Mitchell's first contact was to New Zealand. Mitchell had assembled his own low-power radio when he was fourteen, and by the time he had entered junior high school, he had already made contact with many hams in other countries, including Australia, France, Belgium, Argentina, Denmark, Czechoslovakia and others. Although not as commonly used as they once were, Mitchell still enjoys collecting unique QSL cards from the hams he meets; they are both a mark of pride and proof that you made contact.

Mitchell continues to appreciate the numerous niches within the amateur radio hobby, and there is always something new to pick up. Mitchell recently sent his first contact via radiogram, something he had been wanting to learn for over forty years. All hams record contacts they make; however, only some do so for the purpose of later sending radiograms via "traffic nets" with the help of fellow hams.

"There's always something new to learn," Mitchell said. "I've been in it for 42 years now, and I'm still doing new things. There's always something new to do in this hobby."



COMMUNICATION IS KEY

Having practiced using Morse code for so long, amateur radio operator Todd Mitchell has collected a number of CW keys for his collection, including an old fashioned Russian model (left).



A HAM'S SHACK

Inside his radio operator's "shack," Todd Mitchell has assembled several home radios and other important equipment for making contact with fellow hams across the globe. Mitchell is a long-time user of Morse code and makes nearly all of his contacts using it.



PROOF OF CONTACT

QSL cards may look a little bit like fancy postcards, but in reality, they function as physical proof of making contact with fellow amateur radio operators, or "hams." These are just some of the QSL cards from Todd Mitchell's collection; he also retains a number of cards from when he first entered the hobby.



Wear a mask
in public spaces.



Get tested if you
have any symptoms.



Answer if your health
department calls.