

Ham Radio – Not your Grandfather’s Hobby Anymore!

When most people hear “Ham Radio,” they picture a dusty old receiver in their grandfather’s basement, with crackling static and Morse code tapping away in the background. But let me tell you something - this isn’t your grandfather’s radio anymore! The world of ham radio has come a long way, and it’s never been more relevant, more advanced, or more fun.

Yes, ham radio operators still use Morse code on the air. Just like sailors who harness the wind despite the development of powerboats, they do it because it is challenging and enjoyable. It is certainly not because of a lack of technology however!

In fact, ham radio, often called Amateur Radio, is one of the most technologically advanced hobbies available. Hams have often been on the cutting edge, experimenting with new technology long before it became widely available.

A case in point is the development of tiny satellites, called microsats and picosats. After having put the first amateur satellite in orbit in December 1961 – just 4 years after Sputnik – hams went on to deploy a series of communications satellites. With the rising cost of lifting objects into orbit however, they began to develop smaller satellites, some just the size of a Rubic’s Cube. At first, the commercial and research satellite organizations were skeptical that such small craft could actually achieve anything useful. Hams proved them wrong however, developing satellites that were able to store and forward digital messages, send detailed images back to Earth, and provide real-time voice communications. Today, many organizations use picosats to send research projects into space, including a number of Canadian universities.

In addition to satellites, hams have a wide variety of other methods to communicate with others. For local communications, we often use the VHF, or Very High Frequency band. Mobile and handheld transceivers can reach repeater stations that can retransmit our signals over a range of 100 km or more. It doesn’t stop there however. Many of these repeaters are also linked to other repeaters through the Internet. It is quite common for an Amateur Radio operator in rural Nova Scotia to communicate with a counterpart in a far-off land using a handheld radio.

For longer distances we still use the High Frequency bands, often called shortwave. These signals can travel around the world by refracting off ionized layers in the upper atmosphere. Worldwide communications with low power and simple antennas are an everyday thing, without the need for the Internet or billions of dollars worth of commercial communications infrastructure!

We also use more exotic techniques, such as bouncing signals off the ionized trails left by meteors as they enter the atmosphere, and even off the Moon. These techniques used to be difficult for the average enthusiast to get into, but readily available advanced technology has

opened the doors for many more to join the ranks of “Moonbouncers”. It’s also worth mentioning that most astronauts are Amateur Radio operators, and in their free time they will chat with other hams on Earth from the ISS.

Of course, you will still find grandfathers sitting in their radio “shack” in the basement. Nowadays however, the hobby is more dynamic than ever. Programs such as “Parks on the Air” and “Summits on the Air” have encouraged tens of thousands of hams to get outdoors and set up portable stations. Of particular interest to people in Nova Scotia is the “Lighthouses on the Air” program. Operating near a lighthouse will make a ham a very desirable station, and he or she will have plenty of people wanting to contact them!

Amateur Radio operators also have a proud history of helping in times of disaster. They provided invaluable assistance during the Ice Storm of 1998, the crash of Swissair 111, and other disasters. They were the only link to the outside world for some communities in Atlantic Canada in the aftermath of Hurricane Fiona.

To prepare for such emergencies, hams in North America have participated in Field Day since 1933. Field Day is an emergency preparedness exercise that encourages Amateur Radio operators to go outside and use backup systems to power their radios. Gasoline generators are the most common source of electricity for Field Day, but solar cells, wind turbines and even hand-cranked alternators can be found. The objective of Field Day is to make contact with as many stations as possible while operating under simulated emergency conditions.

In a joint operation, the Annapolis Valley Amateur Radio Club and the Kings County Amateur Radio Club will establish a complete emergency station for Field Day near the water tank at 211 Collins Road in Port Williams. Setup will start on the morning of Friday 26 June, and operations will continue until late Sunday afternoon. Members of the public are very welcome to drop by and learn more about Amateur Radio. As well, a station will be available for visitors to get on the air if they would like to try their hand at radio communication!

For more information about Field Day, or to learn about the online courses we provide, contact Al Penney at alphonsepenney@gmail.com, or go to the respective club’s website: <http://avarc.ca/> and <https://kcarc.ca/>.

We are also on Facebook:

<https://www.facebook.com/groups/avradioclub/>

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