In the 1950s, amateur radio or "ham radio" seemed almost magical. There was no Internet, long distance telephone calls were expensive, and international air travel was limited. People knew that Hams talked to each other all over the world, which was perceived as glamorous and exciting. They also knew that Hams often provided emergency communications during disasters and had played an important role in military communications during World War II.

Most people were pleased to have a ham radio operator in their neighborhood. They were often even quite willing to allow a ham to run a long wire antenna across their backyard.

During that era, many home radios covered shortwave bands, which enabled people to listen to hams talking to each other. Some listeners decided to become hams themselves so that they could participate in this exciting hobby. Their first step would be to begin studying for a license.

**Licensing**

In the 1950s, the Federal Communications Commission (FCC) ruled supreme over the airwaves. The agency totally controlled radio broadcasting, commercial radio communications and, of course, amateur radio. Obtaining a ham radio license required passing Morse code receiving and sending tests and a stringent written exam.

Every aspiring radio amateur quickly acquired a copy of the American Relay League (ARRL) publications related to licensing. These included *How to Become a Radio Amateur*, *The Radio Amateur’s License Manual*, and *Learning the Radiotelegraph Code*. The prospective applicant worked with these self-study aids and practiced Morse code until he or she felt ready to take the exam at an FCC office.
Larger cities, like Buffalo, Detroit, Boston and New York had FCC offices where amateur exams were given on a regular basis. In addition, FCC personnel gave examinations in other cities, like Cleveland and Pittsburgh, on a quarterly basis. Sitting for the examination often involved time away from work or school, and it sometimes required a long drive to an FCC examination location.

By the mid 1950s, the General class amateur radio license conferred operating privileges on many modes and bands. Higher license classes (Advanced or Extra), were required for voice privileges on some of the more crowded band segments. Later in the decade, General licensees were given full operating privileges. The license was issued for five years and was renewable.

Passing the exam for a General class license was not easy. First, the applicant took a 13 word-per-minute Morse code receiving test. If that test was passed, a 13-wpm sending test followed. The applicant was allowed to take the written test only after he or she passed the sending and receiving tests.

The prospective ham who had passed the written test went home and waited until the mail brought the coveted license. Anyone who failed any portion of the examination had to wait 30 days before trying again. Many failed some part of the exam on the first attempt.

Also, in that era, the FCC introduced a Novice class license. It was a one-year, non-renewable, license that offered limited Morse code operating privileges on special Novice shortwave frequencies plus voice privileges on two meters. The Novice class license required only a five-wpm code test and a very basic written exam. Also introduced was a Technician class license that had only a five-wpm code test, but required the same level of written exam.
given for the General class license. This license was good for five years, could be renewed, and provided operating privileges only on the very high frequency Ham bands, where there was relatively limited activity.

Ham Equipment

Once a new ham had obtained a license, he set about acquiring the necessary equipment to assemble his station. In the 1950s, most hams operated primarily on the shortwave (3 to 30 MHz) amateur bands and used separate receivers and transmitters. Hams usually bought a commercially built receiver from companies like Hallicrafters and National Radio and, quite often, built their own transmitters.

A wide variety of receivers was available ranging in price from $50 for a Hallicrafters S-38 to $359 for a National HRO-50. The selection of commercially built ham transmitters was somewhat more limited. A popular commercially built ham transmitter was the Viking Ranger offered by the E. F. Johnson Company for $293. It had an input power of 75 watts using CW and 65 watts using AM phone. It also had a built in variable frequency oscillator. A variety of low-powered, low-priced, crystal-controlled, CW rigs--tailored for the limited Novice operating privileges--were also on the market.

Hams desiring to build a transmitter would find a construction article in a magazine or the ARRL Radio Amateur's Handbook. Then they would search for the necessary parts, do the metal work on the chassis and cabinet, and solder in all the components and wiring. Unfortunately, no matter how good the final product, the builder had created a transmitter that had little resale value.

Those who wanted equipment with a commercial look yet wished to do their own building might shop for a transmitter kit. Companies like E. F. Johnson offered their equipment in kit form at a significant cost savings. For example, a $293 Viking Ranger transmitter sold for $215 in kit form.

The builder would receive a pre-drilled chassis, pre-painted cabinet, and all of the necessary components. He would then do all of the assembly, working from what was usually a very sketchy construction manual. It would have been a real challenge for a beginning ham to assemble one of those kits. It was a job for those with advanced skills.

The Heath Company

NEW HALLCRAFTERS Model S-38

* 50 KC to 22.4 Mc Continuous Coverage
* Electronic Band-Spread
* Built-in PM Dynamic Speaker

The new Hallicrafters Model S-38 is the finest receiver ever produced at price paid. The finely tuned band-spread provides an ideal receiver for any man in the house. In addition, its monaural loudspeaker is an accessory feature to improve overall reception quality. The Select-A-Stereo Band-spread allows the listener to hear the stereo effect. The FM band covers 88 to 108 MHz. The AM band covers 540 to 1600 KHz. The tuner delivers 7 watts of audio output. The receiver is a combination of crystal-controlled and vacuum tubes. The output is 1.5 watts for AM and 0.7 watts for FM. The receiver is housed in a light gray, a year of the art, construction marine grade cabinet.

HALLICRAFTERS Model S-40A

Two new Hallicrafters two-meter communications receivers are this exceptional new model with the most performance ever produced in the amateur price field. A completely new construction feature of the S-40A is its ability to cover the entire 144 to 148 MHz band without any additional equipment and the normal provisions for microphone and standard broadcast receiver signals. A variety of low-powered, low-priced, crystal-controlled, CW rigs--tailored for the limited Novice operating privileges--were also on the market.

The Heath Company

The S-38 (left) and S-40, low-end receivers of the Hallicrafters line, were popular entry-level sets for new amateurs.
changed the world of electronic kits, including ham radio kits, with their "Heathkit" line. Heath’s great success was due in large part to the world-class assembly manual supplied with every kit. Those manuals made it possible even for beginners to successful assemble a Heathkit.

The Heathkit DX-100 transmitter was extremely popular in the 1950s. It had an input power of 120 watts on CW and 100 watts on AM phone and had a built in VFO. It sold for $190 in kit form. Heathkits were often less expensive than other kits, because Heath frequently used new, military surplus parts and bought many other components in large quantities at discount prices.

All of the equipment in that era used vacuum tubes, and the glow from those tubes was a sight never to be forgotten. Unfortunately, the equipment was large and heavy. A Heathkit DX-100 transmitter weighed 107 pounds and a National HRO-50 receiver weighed 84 pounds. Today, such a radio is often referred to (sometimes fondly, sometimes sarcastically) as a "boat anchor."

The final ingredient for getting on the air was the installation of an antenna. Wire antennas were widely used on all of the shortwave Ham bands. Also, some Hams used beam antennas on the higher frequency Ham bands.

**On the Air at Last!**

Every ham remembers his or her first on the air contact. It truly seemed like a magical moment to talk to someone via radio. The conversations included station equipment, occupations, the weather, and other non-controversial topics. In that era, hams did not talk about religion, politics, or anything that might be the least bit offensive. Nevertheless, the conversations were enjoyable.

As the QSL cards confirming contacts began to accumulate, they were proudly displayed for the admiration of friends, visitors, and neighbors. It was hard for someone to not be impressed when seeing the colorful cards from faraway places.

**End of an Era**

As the 1950s progressed, amateur radio began to change significantly. For example, vacuum tubes were replaced by transistors; AM phone was replaced by single sideband; separate transmitters and receivers became transceivers; and Hallicrafters, National, and Heath disappeared. Society changed also, and the ham radio operator no longer seemed to be a glamorous figure.

However, hams have always changed with the times. By the 1960s and 1970s, they accepted SSB, began using repeaters on the VHF Ham bands, and learned how to integrate computers into amateur radio. Nevertheless, those who first experienced ham radio in the 1950s will always remember the magic and romance of that era.