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OLD RADIO

The MICAMOLD XTR-1 Transmitter and a Real 1940s Station

By Scott Freeberg, WA9WFA

Scott contacted me with the idea of an article on his rare transmitter. Since the XTR-1 that I have is not completely original, I jumped at his offer. And since reading about his, I feel motivated to restore mine and work him on the air.—John Dilks, K2TQN

I first saw the Micamold XTR-1 in a *CQ Classics Calendar*. The more I looked at it, the more I fell in love with her simple 1940 lines, modest appearance and minimal parts count. Looking closer, I saw she sported some small luxuries like a built-in power supply, a band switch for 20/40/80 meters instead of individual coils, a pi-network output, a nice looking plate tuning meter and a buffered 6AG7 oscillator to reduce or eliminate chirp. Hmmm, she also sported a 6L6 output tube with an input of 45 W, which is nice enough power for 20 through 80 meter CW.

I contacted the owner of the XTR-1 in the calendar and asked about it. He had not seen or heard of another XTR-1, and I wondered why. I thought it was likely that Micamold sold a ton of these competitively priced transmitters. I started checking magazine ads, asking around, networking and putting out "Want To Buy" ads on the Internet. Two other XTR-1 owners saw my ads and contacted me. No, they weren't selling, but were interested in finding other owners as well. Finally a friend, W0VX, heard about a local XTR-1 and passed along the information to me. I ended up buying that transmitter and I simply couldn't believe my good fortune in finding this rare transmitter.

What the heck was Micamold? Micamold was a major capacitor manufacturer from the 1920s through the 1950s. In the late 1940s they made a brief foray into the transmitter market—apparently very brief, for the XTR-1 was their only ham product I've been able to find.

The typical ham in the late 1940s still built his transmitter, so buying a transmitter kit, even a modest one like this, was likely a big step up. Looking at other transmitters from the same time frame, the buyer could choose from a small variety, including a Meck 60T for \$150, Hallicrafters HT-19 for \$359, Meissner Signal Shifter for \$49.75, WRL Globe



Figure 1—The Micamold XTR-1 transmitter, introduced in the late 1940s, is a rare find today.

Trotter for \$69.95 or a Stancor 203A for \$44.70. So the XTR-1 was a lower cost transmitter. It still didn't come as a complete kit, as you would have to purchase the tubes, a crystal and key separately.

In early 1948 the bare Micamold would have cost you \$34. Buying just a transmitter wasn't going to get you on the air; you still needed to buy a separate receiver. A typical receiver of the time, the Hallicrafters S-40, cost around \$110 for a grand total of \$150 for transmitter and receiver. Adjusting for inflation, I multiplied by 7.8 and came up with \$1170 in today's dollars. An interesting observation is that by 1949, Newark Electronics was advertising the XTR-1 for only \$19.95. That's a huge drop from \$34. I believe this tells us that by mid-1949 the XTR-1 was already being heavily discounted, and was likely leaving the market after only a short run. Why? I believe that there were better, more affordable transmitters coming on the market.



Figure 2—WA9WFA with his Micamold XTR-1 transmitter and vintage Hallicrafters S-40B receiver. In front of the XTR-1 is a solid brass spark-gap Morse code key.

Giles Crabtree, W3PR

It turns out that I wasn't the only one cruising the Internet looking for Micamold XTR-1 information. Giles Crabtree, W3PR, came across photos of my XTR-1 on my vintage Web site (www.qsl.net/wa9wfa). His motivation

GILES CRABTREE, W3PR



Figure 3—The 1948 W9DEW station of Giles Crabtree, now W3PR.

was different than mine: Giles was searching for an XTR-1 in order to recreate his first ham radio station from 1948. Here was a real ham who actually used the XTR-1 when they first came out. I immediately replied to Giles and peppered him with a ton of questions. "When did you use the Micamold? Do you have any pictures of your original station? What was it like to use it on the air? Did you work any DX with it? What was your best DX?"

I was very excited for the chance to hear the adventures from someone who actually experienced using a XTR-1. Luckily, Giles was very happy to share his adventures with me. He sent me a nice letter describing his ham station from 1948 to 1952. He included a photo of the station, a copy of his first logbook contacts and some QSL cards.

He was W9DEW from Peoria Heights, Illinois in the late 1940s and early 1950s. Giles said he had the XTR-1 assembled and ready for the first transmission by March 5, 1948. His first contact was W1CY in Connecticut and later that evening he contacted W0CEN in Davenport, Iowa. Spending all his time on 40 meters, his farthest contact was Califor-

nia. In 1948, 40 meters had no foreign AM broadcast stations to cause interference, so it was likely quite enjoyable. He said 40 meters was all CW then and it was jammed full of CW stations from end to end, resulting in a lot of interference. Giles told me that he and his Elmer, W9BMD, were in the shack on December 7, 1941 after Pearl Harbor was bombed. They were on 160 meter AM phone and wondering if they should be on the air or not. Official word came out the next day that ham radio was to be shut down for the duration of World War II.

The W9DEW photo shows his ham station in 1948. This is what a modest commercial station that was capable of working around the world looked like.

Giles describes his station:

The receiver is a Hallicrafters S-40 with the green plastic dial. I purchased it in the spring of 1946 with money I received at discharge from the Navy. I think it cost \$79.50. It wasn't too selective but did the job. I had to listen to several stations and copy the one I was working, using the "brain filter." I later built a Heathkit Q-Multiplier and that was a great improvement. On top of the receiver is a VFO I built from an article in Sept 1946

It's Front-page News!

45 WATT - 3 BAND CW TRANSMITTER KIT

MICAMOLD XTR-1

Only **\$34.** less tubes, crystal and key

Micamold has the opening shot in the war on high prices with a few priced, high quality transmitter kit parts while every inch of every component. Very simple to assemble. Complete from power supply to antenna matching network. Just plug in the tubes, crystal and key, and you're on the air.

Operates on 80, 40 and 20 Meters

Quality Engineered and Equipped Throughout

BAND SWITCHING—The cost to plug in a few of the switch parts are on 25, 7 or 14 MC band using genuine crystal.

SURFACE CIRCUIT—Crystal ECD (electronically controlled) for exact frequency. Band switch controls built in rugged brass tuned circuit plate and the front panel control. Pin-point matches one antenna. Help out a local (or) signal, no other.

ABSOLUTE SAFETY—No exposed live parts. When used with standard lead-in wire it is impossible to get a shock during adjustment or operation.

SOUNDLY ENGINEERED—Designed to meet and fully guaranteed. Every Micamold XTR-1 is furnished with a component including micamold capacitors, and is sold under the guarantee of the standard quality of the Radio Manufacturers Association. Simple, clear instructions for assembly, wiring and operation.

If your dealer does not have a kit on hand write to us for the name of the nearest dealer or send your order direct to Micamold with your remittance. Your kit will be shipped promptly.

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Figure 4—An ad for the XTR-1.

QST. To the right is a control panel with an open knife switch main switch, a line voltage meter and transmit/receive switches with large red and green "jewel" pilot lights—used mostly to impress visitors! The XTR-1 is at the far right on the table. Also on the table is an ashtray, logbook, pencils and key. All the QSL cards on the wall were from contacts made with the XTR-1 and Hallicrafters S-40.

Scott Freeberg, WA9WFA, is an ARRL Life Member and has been licensed since 1968. An avid Boat Anchor collector since 1996, besides this Micamold station he enjoys operating his Johnson Viking Ranger transmitter and Viking Courier amplifier and his classic Collins 75A2 CW and AM receiver. He was a radioman in the Navy during the 1970s, and is now an engineer designing pacemakers and programmer systems for a major medical manufacturer.

Scott said, "I know of only four other XTR-1 owners. I wonder where the rest of them are. If you own one, or you know of someone who does, I'd love to hear from you to compare notes and information. It would be nice to find out just how many XTR-1s are still out there, and still on the air. I'd also like to find out more information on the Micamold Company's transmitter venture." You can e-mail Scott at wa9wfa@qsl.net.

If you want to see additional Micamold transmitter material plus the rest of Giles' XTR-1 history, you can visit Scott's vintage Web site, www.qsl.net/wa9wfa. He will have the Micamold schematic diagram, factory parts list and more close-up photos of the XTR-1 there. He'll also add more Micamold information as it comes in.—K2TQN