

The Single Sideband Adventures Keep On Coming

On May 1, 1960, Soviet surface to air missiles hit the Lockheed U-2 reconnaissance aircraft Francis Gary Powers was piloting for the CIA over the slopes of Russia's Ural Mountains.

Powers parachuted and was taken prisoner. The U-2's fuselage, wings, and surveillance gear went on public display in Moscow, a move to disprove Washington's claim the jet was a "weather plane."

Among the wreckage displayed at the Soviet's Central Armed Forces Museum was a piece of gear well known to American amateur radio operators of the day... a Collins KWM-1 transceiver.

This historic rig made its commercial debut in 1956 with a 100 watt single-sideband transmitter and a receiver in a single unit. The Collins KWM-1 marked the beginning of the end for AM phone transmission, at the same time combining separate receivers and transmitters.



A KWM-1 in the shack was like a 1956 Cadillac Eldorado Biarritz convertible in the garage.

The single sideband mode the KWM-1 featured had been in existence for decades. It was known to amateur radio experimenters in the 1930s who were leveraging technology largely developed at the AT&T labs. As with so much other technology, the Second World War set amateur radio explorations of sideband aside. It wasn't until the early 1950s SSB began to pick up steam and eventually eclipse AM as the preferred phone mode for amateur operators.

Here in the LVRAC, we have a number of avid SSB enthusiasts. One of them is Bob, AD7J, who is captivated by the mode's many rewards and challenges.

"It's the challenge of working the propagation and trying to make a contact with someone. Having to balance the city noise on the channel with trying to get them filtered out to hear. "Then just to be able to talk to someone in Australia, England, Germany, Spain or a DXpedition is very cool."

It sure is.

When we're trying to slide through a pileup and we hear a DX station come back with our callsign, we experience one of the hobby's greatest thrills. This thrill is especially strong when we're here in Vegas and work a European station that's making most of its QSOs with thundering stations back east.

Bob is well-equipped for SSB and DX. The gear in his shack is impressive...

Radios

- Flexradio 8600 w/ATU
- ICOM IC-7610 HF
- ICOM IC-9700 D-STAR – VHF/UHF and 1.2 Ghz
- ICOM IC-R8600 wide band receiver
- ICOM IC-2730A VHF/UHF
- Anytone 587 DMR - VHF/UHF
- Uniden Trunktracker V scanner
- Ameritron AL-80B 1Kw Amplifier
- Antenna Tuners – Both manual and LDG Autos
- Large monitors to have some real estate

Antennas

- SteppIR – Urban Beam 6-40m
- MFJ Cobweb 6-20m
- Alpha Delta fan dipole DX-CC 10-80m
- HyGain 6BTV Vertical 10-80m
- Assorted VHF/UHF antennas

What a shack. It's mouthwatering. But, of course, we can enjoy operating SSB and even rare DX contacts with much more modest gear. "A hundred watts and a wire" may strike us as a cliché, or a rare occurrence, but it's far from a pair of ham radio handcuffs.

Bob's advice, if you're just getting started...

"Have a good antenna. You need to use a good antenna analyzer. If (you're on) a budget you can use a VNA. Or use something like a RigExpert or Comet antenna analyzer.

"Most of today's current radios have things like antenna tuners, adjustable filters and noise reduction. Have a good speaker or headset. This helps to hear weak signals that you may be trying to get."

And no matter how long we've been prowling the HF bands, listening carefully for distant contacts, there's always something to learn about operating SSB.

Bob shares a few tips to make the inevitable learning curve easier .

"I think a good place to start to become comfortable talking on HF is to use [Netlogger](https://www.netlogger.org/).

<https://www.netlogger.org/>

"Find some HF Nets out there and talk to some of those guys. It's kind of a round robin using Netlogger to keep track of the people and order. They can also help with any mic or sound issues and answer other questions you may have. See what friends you may have that do HF and go see their setup and what they do."

You can also fire off any questions about operating SSB to the LVRAC "[Ask An Elmer](https://www.lvrac.org/elmers/)" tool and we'll be more than happy to help.

< <https://www.lvrac.org/elmers/> >

A parting thought from Bob...

"Get into logging your contacts. Many people are working towards an award. Nevada is a hard one (state) for some people, so if you don't log, that isn't good."

Steve, K7EAU, a cofounder of the LVRAC 10 Meter Thunderbird Net, has often been heard to say, "It's more fun on HF." Feel free to join the net, Sunday evenings at 7:00P on 28.420 kHz. This is a great way to experience the camaraderie we enjoy with SSB.