

Nostalgia

Before beginning this month's topic, I would like to wish a very happy and healthy New Year to all the readers of my column. Hopefully this will be the year when all of your hopes and dreams are realized.

At this time of the (new) year I always like to reflect on where I have been and know that I am truly in "resonance" with the many readers of this column who also remember the "good old days." In fact, any mention of older equipment or techniques usually results in a good deal of mail. That being said, this month I would like to cater to those nostalgic readers among us with a description of a "new" amateur radio station I put together last year.

I have always been a homebrewer (at least up to the popular use of SSB), and my very first station, back in the 1950s, was a 20-watt (input) plate-modulated transmitter using a 2E26 in the final driven by a couple of 6AG7s. The modulator, as I recall, used a couple of 6V6s, a 12AX7, and an ARC-5 modulation transformer. The output was a pi-network (the coil wound on the ceramic form from the same cannibalized ARC-5), and the feel of "dipping" or resonating the plate circuit and then slowly increasing the loading to the antenna to squeeze out every last drop of RF was something I never forgot. The receiver, by the way, was a Hallicrafters S38A, which I still have.

Time went on, and by the 1960s the single 2E26 evolved into push-pull 6146s (with 6L6s in the modulator), but the pi-network and the "dip and load" technique remained. Eventually, in the '70s I became very interested in 6 meters, and the fortunate acquisition of a few 4X150s from surplus sources (Canal Street and Cortland Street in New York City) allowed me to build a really powerful "TV channel 2 and 4 interference generator." I managed to work 40 states on 6, however, and prove to one and all that Drake filters at the transmitter and on the twin-lead input to the TV set would indeed eliminate interference. Those were the days!

Then the transistor came on the scene big-time, and automatic tuning became the rage. This, of course, has carried into the 21st century, and I don't

believe that anyone buying new equipment today even remotely thinks of any sort of manual tune-up of a final. Even outboard antenna tuners are slowly becoming totally automatic, and the manufacturers are proud to let you know that fact.

Well, that may be the "modern way," but this past year I had the opportunity to purchase an older Kenwood TS-530S transceiver (complete with the 6146s in the final and a 12BY7 driver) and jumped at the chance. Although I was proud of my homebrew equipment, I had always secretly coveted such "top of the line" equipment, but alas could never afford it "back then." For about 25% of what it originally cost, though, I had the opportunity to travel back in time to the early 1980s, so I took it. The rig arrived spotless (along with an instruction manual that was in such new condition it seemed never to have been read) and appeared to have been manufactured yesterday. I immediately opened the cabinet and of course the RF cage (how could I resist?) to take a look at the 6146s. Yes, there they were, side by side ready to pump out RF and made by RCA to boot. The glass envelopes were spotless, and there was not even a layer of dust to be seen anywhere. Truly this rig was previously owned by someone who at least understood and appreciated what he had.

Next came the acid test. With my 30-watt dummy load (made of 2-watt carbon resistors as described in a column last year) connected to the SO-239 UHF antenna connector I turned on the rig and set the bandswitch to 14 MHz. Immediately, even though no antenna was connected, I could pick up a couple of stations while tuning through the 20-meter band. With baited breath I turned on the heater switch (you newcomers might not know what that switch was for) and waited a minute or so for the tubes to warm up. Setting the rig to TUNE and TRANSMIT, I slowly increased the CARRIER control while peaking the DRIVE control (as per the instructions in the manual), and was happy to easily get the correct reading on the ALC position of the meter switch.

Next was to switch to Ip (plate current) and of course dip the final. The dip was small but definitely there. Now with an RF voltmeter connected across the dummy load and the rig switched to CW,

*c/o CQ magazine

The Kenwood TS-530S, a top-of-the-line transceiver from the early 1980s.



I once again flipped the switch to TRANSMIT. What a thrill! Plate current came right up to a couple of hundred milliamperes, the RF voltmeter indicated "life" across the dummy load, and the high voltage peaked at around 800 volts (definitely not solid state). The dip was quite prominent, just like in the old days. The loading control also worked fine, just as I remembered it should, and the dummy load began to heat up rather quickly. In fact, everything seemed to work as well as it did when the rig was new. I must congratulate Kenwood for the great job they did in those days.

For those who are interested, by the way, the 6146s in the output stage produced a solid 120 watts (at 14.300 MHz) when tuned and loaded into a 50-ohm resistive load. A \$40 manual antenna tuner completed the "vintage" station and allowed a better than 1.3 to 1 match to a 20-meter dipole on all bands from 20 up to the top of 10. Needless to say, operation was (and continues to be) a pleasure. This is truly a combination of the old (three vacuum tubes) and the new, since the rest of the rig is completely solid state.

I relate this adventure to you for two reasons: The first is to convey that the pleasure I got from operating this "antique" rig was (and is) well worth the price I paid, not to mention the memories it brought back of my earlier years in amateur radio. The second is that the higher quality 20-year and older equipment that is still around has a good deal of steam left and easily can compete with more modern rigs. In fact, a friend of mine with a \$2000+ solid-state DSP rig cannot hear much more than my TS-530S, although to be fair, he is able to deal with some forms of QRM better, but electronics is doing the job, not necessarily operator skill. The more than \$1700 in savings, however, easily compensates for this "human shortcoming."

The bottom line is that anyone with a limited budget just starting out in or deeply involved in amateur radio can get really top value from equipment such as the TS-530S without breaking the bank. If this excites you, first find some old copies of CQ or QST and read the various reviews to determine what your dream station (circa 1980) would consist of. Then do a search or take a look at <www.qsl.net> to see what the older equipment looks like. Finally, search at hamfests, dealers, and on the web at <www.e-bay.com>, <www.arrl.org>, <www.eham.net>, <www.classifieds.qth.com>, etc., for your prize. It may take a while to locate it, but it is out there waiting for you!

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