

A techie's toast: 'Here's looking at you, kit'



It was 1958 and my 13th birthday was coming up.

"I want a VTVM," I said.

My father's forehead furrowed.

"A Heathkit vacuum-tube voltmeter, for measuring voltage and resistance. I'd build it. It's \$24.95. Maybe a couple of dollars more for shipping."

My father can handle a hammer and straightedge with alacrity and skill, but there were no Heathkits or vacuum-tube voltmeters when he was a kid. Sure, he said, perplexed. OK.

I plugged in my soldering iron, sorted out the resistors and capacitors, and plunged in. Some instructions I read. Others I ignored. My eyes swept past Heath's poster-size diagrams showing the exact placement of each tiny part on the circuit board. Intuition told me to stick the tips of the wire leads into the board and solder everything in place. A rain forest of vividly-hued componentry trembled on skinny wire stalks above the circuit board when I was done, and the VTVM didn't work.

I took it to a friend who fixed radios and televisions in his spare time. He stared at the mess, his face as unreadable as a poker player's. I should have tucked the parts tight up against the circuit board, he explained. It took several days to undo the damage, but finally I could measure voltage and resistance.

Kit-smitten, I tore into more Heathkits. A two-tube ham radio transmitter, the DX-20, followed. I stayed home sick (Mother knew better) the day after my ham license came. I didn't have a real antenna, so the window screen in my bedroom was pressed into service. It worked. My nervous, halting dots and dashes tossed into the ether found an ear in Florida. Jim was his name. He answered me, gearing down his natural sending speed tenfold for my benefit. We exchanged Morse code greetings through

the static crashes. Sweet radio mystery!

The Heath Company and I worked out a relationship: I supported them, if not lavishly; they kept introducing new kits. I lost count at 40 or so. Stereo systems. Tuners. Amplifiers. Receivers. Speakers. A bizarre record changer that hissed to a stop during the changing cycle to keep the records from grinding together (years later I learned that all LPs have raised rims to prevent just that). Signal generators. Oscilloscopes.

Night after night my little 30-watt soldering iron sent pungent rosin smoke curling ceilingward. The hour would grow late, and my fingers would fumble to clutch tiny 2-56 nuts and turn them onto tiny bolts. Occasionally I erred. Then I would consult St. Joseph, Michigan, where banks of nonjudgmental Heath technicians handled calls from confidence-impaired customers.

I left home but couldn't kick the habit. When I married, my wife had to stay out of any room where I was kitting; I didn't want anybody bumping into my muffin tins full of stuff. A transistor that fell into the rug would simply vanish. My last Heathkit, built in the late 1970s, was a 19-inch color television. It worked great until a year or so ago.

The question of motive raises its inquisitive head. Did my labor save money? I spent 50 hours building the TV—spread over more than a month of evenings and weekends—for no cash return; my labor was worth nothing. The TV cost about \$650 after buying the cabinet (an extra-cost item—classic Heath). I could have bought a ready-made model for that. Probably less.

I didn't try to figure out the kit thing until I stopped doing it. Then, of course, it was obvious. I could mess around like a 9-year-old with a chemistry set, but instead of sulfur fumes my prize would be a high-tech gadget. I was an engineer without portfolio.

Back then, electronics also constituted Art for persons inclined to slide rules and horn-rims. Brightly banded resistors and fingernail-size other capacitors neatly laid out in rows on translucent green circuit boards, multicolored cables tying the boards together into a pleasing whole, constituted a techie esthetic. At one point, Heath promoted the "beautiful birch cabinet" of one of its lab instruments, and the "attractive two-color panel" of a tube tester.

I was not alone in my admiration. Heath prospered during its quarter-century heyday that spanned the 1950s, '60s and at least part of the '70s, selling kits to millions of teenagers and postadolescents—a crew almost exclusively male, according to Heath's market research, and no surprise, either.

A year ago Heath announced that it was leaving the electronic kit business. I picked up the phone. "How can you do that?" I sputtered. The company spokesperson, a woman, was unemotional. She was from a different era. People don't have time to build kits anymore, she said, marketing data flickering through her head.

She had a point. It had been more than a decade since I assembled my last kit. But it's more than a squeeze on spare hours. It's also the loss of esthetics. Electronics no longer has a soul; like much of today's technology, it is functional but cold. Every VCR looks like every other VCR. All the cabinets are gray or black. Quite frankly, I can't even tell which button does what; somehow the digital displays seem to flash 12:00 within a couple of days no matter what I push. The soft glow of a vacuum tube will soon be relegated to nostalgia and the memories of codgers like me.

The *New York Times* put the Heath story on page one. It was tender and elegiac. I knew: another kit guy.