K9YA Telegraph

Robert F. Heytow Memorial Radio Club

Volume 3, Issue 11, November 2006

The Keyer Project

A Keyer Small and Sweet

Philip Cala-Lazar, K9PL

It was the Radio Shack microphone cable's fault. It had been on closeout at their local outlet—now—like so many others—recently departed—R.I.P. I was using it to connect a couple of paddles (see: *K9YA Telegraph*, October 2006, pg. 1) to my LogiKit CMOS-4 keyer. Problem was within 30 seconds, or so, the keyer generated spurious characters, spewed its raspberry error signal and locked up. Funny, I didn't have this problem with the vintage Bencher and its almost equally aged shielded jumper cable—they've been working flawlessly in tandem all these years. How odd.

"…the raspberry blossomed…"

I went through all the permutations to find the glitch and solve the frustrating problem: double-checked all solder joints; did the ohmmeter thing; eyeballed the stereo plugs; and considered the implausible—dissimilar metals behaving like a battery. The light bulb lit—alligator clip jumpers from the paddles' terminals to the solder lugs on the Bencher's underside and the problem disappeared. Back to the Radio Shack cable leads and again the raspberry blossomed as the keyer locked up. It wasn't just one of these Radio Shack cable assemblies, but three cobbled together over the last couple of years and using different brands of miniature stereo plug—the cable the only constant.

Enter the PicoKeyer

It was about that time I decided to order an intriguing keyer kit that held my attention a while back. The *K9YA Telegraph* staff thought it would be fun to introduce, in addition to our weekly HF CW practice net, a 2-meter FM code practice net—live—using modulated CW. I found two circuits for MCW generators in the ARRL's *Hints & Kinks*, 15th Edition and research on the 'Net turned up the NØXAS PicoKeyer kit (http://www.hamgadgets.com). This very small device performs a long list of functions including MCW, so it was ordered with the optional potentiometer that makes it possible to vary WPM on the fly.

Once ordered, the PicoKeyer soon arrived in a very sturdy box and was quickly assembled following NØXAS's "Step-By-Step" instructions. Complete and powered up with the included CR2032 battery, the tiny speaker issued the "73" acknowledgement that all was well.

A Serendipitous Enclosure

Built into a plastic box, 3 1/8-inch by 2 1/4-inch, that originally housed photographic transparencies, the keyer PCB was a perfect, slide in, fit. (It could just as easily be added, as built, to a QRP or QRO rig.) Now that the onboard momentary switch that selects operating modes was no longer accessible, I extended leads from GROUND (Pin 1) and Pushbutton In (Pin 4)

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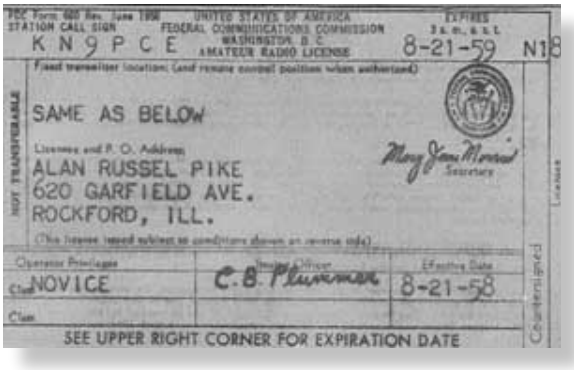
Just Blame It All On Ralph Anderson

Alan Pike, W4MQC

Alan, W4MQC

Blame him for those wasted weekends of QSO parties and sweepstakes. The mosquito bites, poison ivy, indigestion and sunburn from countless Field Days could also be attributed to Ralph. While we are at it, throw in thousands of dollars worth of National, World Radio Labs, Eico, Hallicrafters, Central Electronics, Heathkit, Yaesu, Icom, Kenwood and Ten Tec radios that have graced my operating table. Or how about the 500 miles of copper wire I have been through over the last 48 years? It is all Ralph's fault.

Ralph was my pal. He lived about six blocks from my house on Garfield Avenue in Rockford, Ill. We were in the same grade and in the same school. We were in Scouts together, and Ralph's Dad ran the local Texaco gas station.



But at 13, Ralph hit a patch of bad luck. He came down with a bad strep throat, which led to rheumatic fever. He was confined to a bed for several weeks. He quickly read all the Hardy Boys books he could lay his hands on. Piles of dog-eared copies of *Boys' Life* were stacked up all over his room. In order to diminish Ralph's boredom, his dad picked up a used National SW-54, five-tube superhet receiver, from one of his customers who happened to be a ham. I can recall visiting Ralph on several occasions finding him hunched over the SW-54, clad in PJs and bathrobe, telling me things like, "this is BBC… and this is Radio Moscow." It was amazing. We were hearing stations a world away.

Ralph's reading habits changed and he started studying electronics books. Next came a license manual from the ARRL, along with a book called *How to Become a Radio Amateur*. He taught himself the Morse code on an old tube-type code practice oscillator. A month passed, and Ralph was ready for his first hurdle. The examiner was a ham who came right to his house and gave him the Novice test. The test was shipped off to the FCC. Next there came a period of begging his folks for a transmitter while he waited for the FCC to send him his license. The wait time was about six weeks to two months to get your ticket in the mail. Every day, Ralph would lay in wait for the mailman to deliver that little, 3½" x 5", envelope with a postmark of Gettysburg, Pa. on it. Then, one day, it arrived. I got a phone call from him.

"I got my ticket," he hollered. "My callsign is KN9GGZ." Which meant little to me but sounded pretty exotic. "Now you have to get your ticket so I will have someone else to talk to," he said.

The challenge had been issued and I was not going to get left out of all the fun. Ralph gave me his books, loaned me a key with a code practice oscillator. I set up the contraption in my bedroom and started bleating away, pushing the key and making noise. My dad was impressed and gave me a lot of encouragement. Then he presented me with yet another incentive. "You know, your Uncle Buster is a ham," he told me. A week later, I got a letter from Uncle Buster who had the callsign of W4MQC in Hialeah, Fla. He told me I should get my ham ticket so we could talk on something called 20-meters and avoid all those long distance phone calls. It seemed to make some sense, so I learned the code over the next few weeks, and started reading up on the the-

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ory behind the test. There was an old table radio in the cellar that had some shortwave bands on it, so I would spend hours down there next to the coal bin listening to foreign broadcast stations jabbering in a strange tongue. I was listening to the world. The old receiver had a healthy a.c. hum to it, and the worn cotton-covered cord was a bit worrisome, so I made the decision to empty my paper route savings account, and purchase a new and proper receiver. Browsing the Allied Radio catalog, a ham bible of sorts, I selected a Hallicrafters S-38D. It was gunmetal gray with a big window in the front with all the major world capitals plus ham bands printed on it. As you moved the green tuning indicator across the face of the dial, voices came out of the speaker. Rio. Berlin. Tokyo. 40-meters. "CQ CQ this is W1KNE." I was inspired to study even harder.

Ralph was now on the air. He had a single-tube transmitter that was homemade by a local ham. The tube in the power supply glowed the most beautiful purple I had ever seen, and he tuned it up with a Christmas tree light for maximum brilliance. It was one of those lights that had the bubbles in it. It had plug in coils for 80 and 40 meters, and put out about 10 watts or so. "Talked to a guy in Pennsylvania today," he would tell me. "Chatted with a guy in Boston who is a fireman," he would say. "Made it all the way to a station in California, but I lost him in the QRN." It sounded mystical. What in the world was this QRN stuff? I was hooked.

My turn came that July of 1958. I took my Novice test and sent it all off in the mail and started the interminable wait for the mailman. Ralph had been successful in convincing his folks to help him buy a new transmitter to go along with his SW-54. He picked up a used Globe Scout 65a. It was painted gray, and looked almost industrial. Now he was making contacts all over the world. "Made my first contact with England," he told me. Wow. England. It was hard to fathom. "If you get your ticket," he said, "I will loan you my old one-tube transmitter." School had started up again, and now my daily ritual was to stop by Ralph's house to see who he had talked with during the day, then run home to ask my Mother the daily question, "Any mail for me?"

One day, I came home to find the house empty. My mother was grocery shopping. Sitting at my place at the dining room table was an envelope. A small envelope. Only 3½" x 5." It was addressed to me and postmarked Gettysburg, Pa. I tore it open. I was now a ham. In the upper left corner it said "STATION CALL-SIGN." Under that was typed "KN9PCE." I called Ralph, who was busy with Yuri in Moscow, but signed off long enough to congratulate me and ask me for a "sked" to be my first contact. I raced up to my bedroom where the venerable one-tube transmitter and S-38D lived. I turned on the receiver and rolled the green pointer to 7 megacycles. I had 3 crystals, so I chose one labeled 7.120 and plugged it into the front of the transmitter. I pressed the key down to touch up the tuning and get the Christmas tree light really bubbling. I found the signal on the receiver so now I was ready. I heard, "KN9PCE DE KN9GGZ KN." come through the speaker. I was sweating. My hand was shaking. My stomach was churning. This was it. "KN9GGZ DE KN9PCE HW CPY RALPH? K" I sent with less than perfect spacing. "KN9PCE DE KN9GGZ R AL RST 599…" And so it went. My first QSO—the first of thousands of QSOs since that day in 1958.

KN9PCE's Dream Station

Ralph and I made it through high school. We sort of drifted apart a bit. He had a steady girlfriend, and I was running in a different crowd. We would sometimes see each other at the club station set up in the high school auto shop. We both went off to college. I ended up in North Carolina, and began bump-

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An Apple for Mavis Beacon

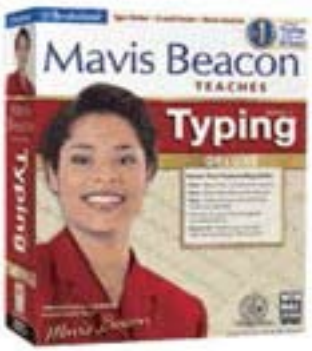
Typing Skills for the Amateur Radio Operator

Kevin der Kinderen, K4VD

Kevin, K4VD

Many years ago I decided to play around with programming. I would buy magazines and books and sit for many hours typing lines of BASIC code on my Fat Mac or Commodore 64. I quickly realized I should have paid more attention to my typing class in high school. Typing was a chore that took much of the enjoyment out of the programming sessions. Now, as a digital operator on the ham bands, I often find myself thanking Mavis Beacon for her patience and teaching skill.

Mavis Beacon Teaches Typing was and is an amazingly effective program. With it I brought my typing skills from painfully slow and inaccurate hunting and pecking to about 70-wpm touch-typing. This speed is perfect for staying ahead of some of the fast digital modes we Hams have available to us. I can type my response while reading the incoming text. When it's my turn, I hit the send key and then go fill up the iced tea or take care of other business and never miss a beat.



I purchased Mavis Beacon around 1985—I think for the Commodore 64. It was a fun program and kept me interested enough where I spent about an hour a night practicing the typing drills or playing the skills games. It began with just a few keys at a time and when the program feels you've mastered those keys it will add one or two more. Each time it would drill you on current and past characters, grade your progress and tell you where you needed more practice. It would then tailor the drills to give you that extra needed practice.

For a break, there was a simple and fun typing game that reinforced learning. Characters would fall from the top of your screen and you would have to type them before they reached the bottom of the screen. As time went on, more characters would appear and move faster. It was very much like Space Invaders.

Since 1985, I have been programming as a hobby, working ham radio digital modes, typing reports for work and writing a few articles for my Web site (http//www.kj4qf.net). In all that time typing has been effortless—easier than using pen and paper. I can concentrate on the task at hand without worrying about the tool I'm using.

In 2005, I happened to be in OfficeMax and noticed a fresh copy of Mavis Beacon Teaches Typing on the software shelf. She hasn't aged a bit in twenty years. I had to bring her home and get reacquainted. I selected "beginner" mode and quickly progressed up through the lessons. My typing speed tops out at 70- to 80-wpm—not high-speed professional typist stuff—but certainly enough for my needs. While the look and feel of the program has changed, the drills remain essentially the same. You'll start with a few characters and more will be added as you progress. There's a new typing game to give you a break when needed.

I think the latest version of Mavis Beacon Teaches Typing will be at least as effective for the new typist as it was in 1985.

If you are enjoying the digital modes but find yourself often apologizing for your typing, do yourself and the ham at the other end a favor; give Mavis Beacon Teaches Typing a shot. She costs about $20 U.S. and it may just be the best $20 you ever spent on the hobby. You might find yourself using less canned messages and having more enjoyable conversations on the air. ■

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Suddenly a Crisis

Joseph Calzaretta, K4LL (ex K2VI, K2ZCU)

For thirty years I was an elementary school teacher in Spencerport, N.Y. (a suburb of Rochester, N.Y.). During many of those years I taught math, science, remedial reading and other subjects. I also had a Novice amateur radio station set up in my classroom. Quite a few of the 11-12 year olds earned their Novice license and got on the air.

After school I would go home, have dinner and work/play with my own kids. About 6 p.m. most evenings I would go to my radio room to correct and grade the mountain of paperwork generated by my students that day and prepare special lesson plans that would relate amateur radio to the material I taught. This usually occupied about two or three hours. While doing the paperwork I listened to stations on 20-meter SSB.

In late 1976, one Friday evening about 6:15 p.m. I was marking papers while listening to a ham radio station in Yugoslavia talking to a ham aboard a U.S. Navy ship in the north Atlantic. There was lots of QRN and fading in and out of the signal from the ship. I had difficulty hearing the ship, but not the YU station. The YU was also having trouble hearing the ship.

"CQ Stateside."

The YU was asking the Navy operator to help him get some urgent medication. The Yugoslavian lost contact with the ship and began frantically calling, "CQ Stateside," "CQ Stateside." I immediately broke in and asked if I could help. I listened intently as he told me he was in a small village in Yugoslavia and the hospital there had a very sick child with a brain tumor. The doctors did everything they could for the child, but nothing had worked. They told him a new experimental cancer drug serum called BCNU was being tested in the United States and requested he contact a U.S. ham/doctor/hospital immediately to obtain the serum, as the child would not last very much longer. He said his government did not like him to ask for help from the West but this was an emergency. He would deal with any repercussions later!

I found out the drug was produced in a laboratory in Bedford, Ohio and tried telephoning them. However, it being after 6 p.m., they were closed. Having no luck, I telephoned my friend Joe, WA2IMO. He lived about five houses down the street from me. He also taught in the same school district I did and also had a ham radio station in his classroom (high school shop class). I asked Joe to maintain contact with the YU station while I tried to find some other place to get the drug. Having no luck finding a source, I got back on 20 SSB and told the YU ham. There was silence for about 20 seconds until the YU came back and said, "Please, please try again." WA2IMO jumped back in and said he would try to contact someone to help us. He had better luck! I continued to talk to the YU on SSB. I noted where he lived, the name of the hospital and the doctor's name and telephone number. This information was passed to Joe, as he was able to contact Dr. Paul Divignon of the National Cancer Institute in Bethesda, Md. Dr. Divignon authorized the serum's release. The doctor also contacted the U.S. Department of State.

Joe, K4LL

The next morning the drug was in a diplomatic pouch on a flight from Washington, D.C. to London. From London it was flown to Rome, Italy. From there it was driven to the Yugoslavian border where it was picked up by a doctor to be delivered to the sick child.

Several weeks later I received a QSL card from the YU ham thanking me for my help in procuring the serum. He never said if it helped the child. I only hope it did. ■

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Not Your Average Love Story

Wireless Soul Mates and Man's Best Friend

Rod Newkirk, VA3ZBB/W9BRD

Photo Credit:
B. Sullivan

I'm always a pushover for poignant tales of wartime romance, especially those with a radio slant. Probably the best in my collection is that of Margaret "Peg" Walker, a longtime favorite friend of XYL Betty. To begin with, my ears perked up when she mentioned working in the 1930s with the legendary Dr. H. H. Beverage, ex 2BML, at RCA's Manhattan office. They were on nickname terms, Bev and Peg. This was enough of a story for me, but that was just for openers.

Pert little Peg Yoder worked beside someone else in that 12th Street headquarters, a young radioman named Ken. Heart-wrenching love, head over heels. They would have married then and there, but WWII was looming. Ken enlisted in the Army Air Force. Peg managed to rendezvous with him whenever possible at training posts around the country. The chase was chaste, in the custom of the day; Peg's mom accompanied her. Their tender meetings ended when Ken, now a qualified flight leader, was transferred overseas.

The air war for control of the Mediterranean grew more treacherous day by day. Ken's mail to Peg couldn't allude to the catastrophic losses, the vanished comrades. Emotional correspondence piled up at both ends, including such photographs as censorship allowed. Ken sent pictures of his team's mascot, called Brownie. The dog, fully outfitted in flying suit and oxygen mask, always flew into battle aboard Ken's bomber, Peg O' My Heart.

Almost always. One morning Brownie was under the weather and didn't make muster. Peg O' My Heart took off to attack heavily fortified enemy islands without him. Murderous puffs of flak, as usual, filled the skies. The war suddenly ended for Ken and his crew. No trace of them or their plane was ever found. Peg's dreams for their joyous future began fading when Ken's letters stopped. She wasn't one to surrender all hope easily, but cruel reality prevailed.

Ken's career with RCA involved Morse code. He hadn't gotten around to a ham license but the interest was there. After Ken went away, Peg began working on a surprise for his return. She was quietly practicing the code. How amazed and delighted he would be when she greeted him and expressed her love in dots and dashes: One more dream dashed to bittersweet memory. So far this is just another love story, but there's more.

Ken's squadron command was well aware of the great love of this life. Overcoming impossible wartime logistics, it was arranged to have grieving Brownie shipped stateside to disconsolate Peg. News media got wind of this. Peg O' My Heart's valiant mascot took a war here's turn in the sun. The image of tearful Peg hugging Ken's dog moistened many a war-weary eye. You'll be glad to know that Peg eventually learned to love again. She enjoyed a fine marriage. husband Tom welcomed Brownie to their domestic circle. He was the Walker family's beloved mascot for many happy years. ■

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on connector JP1 to the yellow-capped mode switch seen atop the enclosure in the photograph.

The labels were created using MS Word on a laser printer and laminated with 3M packaging tape (just the right size!) and applied to the enclosure with 3M Photo Adhesive spray.

The PicoKeyer is a very compact, easy to use, versatile and function-loaded device. Its only shortcoming, for me, is its low speaker output—sealed in the enclosure it cannot be heard. My way around this is to remove the box end when an operating parameter change is needed, this, however, demands low ambient noise in the shack. The instruction's troubleshooting section notes the low audio output and suggests adding a "small audio amplifier and larger speaker."

Stay tuned for that 2-meter MCW net. ■

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ing around the U.S. and we lost track of each other. He was living in Maryland and had a different call-sign. I had changed my call six times, raised a family, had a career and continued to love CW and ham radio. After a stressful day at work, I found copying CW healing. It is tough to worry about the woes of the world when you are trying to pull a weak one through the noise on 80-meters. A QSO was something I could be in charge of without a hassle. A spin of the tuning dial on the transceiver gave you the freedom to go anywhere. No wood chips to sweep up. No paint brushes to clean. Turn it off, walk away, and put out the lights. Of course there has been the constant diatribe from the family, "Why would you talk to Ivan in Irkutsk, a total stranger, when you could talk to me?" There has also been the perpetual embarrassment by the kids, "Dad, you are so bizarre with that ham thing." Or, "Dad, you are such a geek." There have also been thousands of conversations with people who have common interests. There is the sense of accomplishment from upgrading, mastering the code and learning new technology. There is the wonder of being able to talk with someone on the other side of the world. And when the same calls keep showing up in the log, like VE3OU, Ernie; or W3DP, Dick; or Nick, KA3SJK; and hundreds of others… there is the friendship part of ham radio. That's the best part. I blame Ralph Anderson for that. ■

When The Going Gets Tough…

India Paramilitary Turns to Morse

An India eNews item reports India's largest paramilitary force is using Morse code to overcome communication problems as it pursues Maoists through the forests of Chhattisgarh state located in the central part of that country.

Personnel of the Central Reserve Police Force (CRPF) engaged in the area often rely on Morse code to communicate when the other modes available to them, including mobile telephones and wireless systems, fail in the difficult terrain.

"We consider it the most dependable means of communication as it never fails and messages are easily sent across to seniors," said an official leading the anti-Maoist operation. And, despite the lack of "modern infrastructure" in the jungles, "Morse code worked without any problems. The personnel may be camping in the middle of a jungle but this system never fails."

Prior clearance from the Department of Communication Police Wireless normally is required to convert a high frequency device to talking mode, however, an exception has been made for personnel engaged in the jungles who have been permitted to convert without such an order.

Although CRPF personnel are trained to use GPS for communication, "…not all of them are able to use it effectively due to lack of training and knowledge." ■

Ham History DICK SYLVAN, W9CBT

REMEMBERING THE HQ-100 RECEIVER

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Volume 3, Issue 11