

# K9YA Telegraph

Robert F. Heytow Memorial Radio Club

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## The Cracker Barrel

*Tales of a Time Not so Long Gone*

**Philip Cala-Lazar, K9PL**

In previous columns, I've written that we Hams are a gregarious bunch—just monitor our band allocations, propagation permitting, for proof. We love to QSO with old friends and greet new ones to pass on signal reports, describe local

weather conditions, reel off the shack “boast list” and chew the rag. We're always hankering to hang out with other ops, both on and off the air.

### From Cave to Cracker Barrel to...

Of course, we are not the only group that enjoys socializing; all humankind takes pleasure in communing. To facilitate these interactions we need a place to gather, and through the ages many of these places have become part of the language, consider: meeting around the cracker barrel, the potbelly stove, the campfire, the scuttlebutt—all legendary foci for meeting and discussion. So, where do Hams meet face-to-face? There are local radio club meetings, weekly lunchtime gatherings, Hamfests, special events, Field Day; bunches of places where eyeball QSOs occur.

Not so long ago, the majority of all Hams eventually visited a local, FCC-designated, meeting site—the waiting area.

### A Very Special Day

Friday in Chicago was a very special day for Amateur Radio operators—it was the day designated by the FCC for license examinations. The final day of the work week dawned as ninth district Hams, with their wakening

breath, inhaled air quivering in anticipation of questions to come and skills to demonstrate. They had an 8:45 a.m. rendezvous to share the rites of passage essential to their radio autobiographies.

Shunning breakfast as their knotted stomachs rejected sustenance and bolstered only by a speedily slurped cup of scalding coffee, on they came via road and rail. Those leaving the driving to others used their freedom for some last minute cramming. En route, billboards and traffic

signs became Morse tutors as test-takers transliterated text to letters to Morse characters and “heard them” keyed in their favorite sidetone—for most of them, it was their first experience at “mobile CW” operation.

This migration of Hams funneled into downtown Chicago where elevators in the Kluczynski Federal Building whisked them to the FCC office. There, this ephemeral

congregation joined in the waiting area where tension and excitement electrified the atmosphere as old acquaintances were renewed and pre-exam jitters soothed. A bug, secreted in its “black simulated morocco” Vibroplex carrying case, brought confidence to one examinee. Through the glass door, each new arrival was checked for recognition even

*“...their knotted  
stomachs  
rejected  
sustenance...”*

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# Secret Service for Me

**Paul Hendershott, W9BBR**



President Gerald Ford  
and Paul Hendershott

“Son, I’m with the Secret Service and you’ll have to come with me” Never in my 16 years of limited life did I ever imagine I would hear those words. But there I was, being hauled off, away from the big raised platform in the middle of Valley Forge State Park by two Secret Service agents of the Treasury Department. Away from the stage where the president of the United States would soon be addressing over 100,000

anxious, patriotic citizens.

Not too far away, on the side of the adjacent hill, I could see my mother with one hand over her mouth pointing me out to my father. It must have been quite a sight for them to see me held tightly between these two strange men in suits, marched away from them with some confused look on my face. All I can think is I must have looked calm because I don’t think they ever came looking for me. Not that I could blame them; they staked out their little spot on that hill along with some of our neighbors, almost three hours earlier, so they would have a good view of the president. Apparently a parent’s love goes only so far!

It all started two months earlier when Ralph Williams, N3VT, of our Norristown, Pa. Civil Defense and RACES post informed us we were chosen to be part of a select team of emergency responders. We were to provide communications for the president of the United States when he came to Valley Forge Park to transform it from a state park to a national park. It was 1976 and our nation was celebrating the Bicentennial. A caravan of Conestoga wagons had traveled across the entire country to converge at Valley Forge Park on this momentous occasion. It was

wonderful and it was an honor!

The morning of the big event finally came. We were all supposed to meet at 6 a.m. at the ranger station to pick up our Civil Defense badges and park clearances. We were assigned a large communications van behind the main stage, where we were to coordinate communication between the numerous ambulances, fire trucks and park police during the event. With over 100,000 people in attendance, it was a sure bet some emergency services would be called upon.

Now, my dad is usually the early type. The type of guy who leaves for the airport three hours early. We got a late start that morning and things got worse once we entered the park. You see, Valley Forge Park basically had one one-way road that snakes throughout the entire park. So, by the time we got there, there was a one lane, two-mile backup. By the time I showed up at the ranger station to claim my Civil Defense badge, the crew was already in the van up by the stage and springing to action. No problem I thought, I’ll just mosey over to the van, pick up my badge and join the rest of the crew. This would prove a trickier task than I thought!

*“This would prove a trickier task than I thought!”*

My first attempt to reach the stage area was thwarted by the park police. I told them who I was and where I was trying to go, but they insisted all personnel had to have a badge. I told them my badge was in the van, but they were not impressed. “Sorry son” was all they would give me. Now, after being turned away from the direct frontal approach, I figured if I could just work my way around to the back of the stage area, it was only a 200 foot run to the van. So, acting a little like a kid meandering down the street kicking pebbles with nothing much to do, I worked my way around to the police tape and got ready to make my move. As soon as I grabbed the tape, two guys in suits and one in blue jeans intercepted me and interrogated me by the water fountain. “Just what do you think you’re



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doing, son?” “Who are you?” “What do you want?” I pleaded with them to escort me a few hundred feet to the van to prove I was just like them, I was one of the president’s men! That I was there to protect the president and the crowds! Now, I don’t know if it was because of how I was dressed or that my hair hung down in my face, but these guys weren’t buying! They said, “. . . maybe it’s true, maybe not, but the president is arriving soon” and “. . . we can’t break protocol.” “Sorry Son!”

Now, most 16-year-olds would have just dealt with the disappointment and given the Secret Service the respect they deserved, but I was starting to panic. I couldn’t believe history was about to be made in just a few short minutes and I was going to be cheated out of the greatest honor a Ham Radio Novice could have! I just couldn’t let it happen. I had to somehow get to that van. My badge was in that van! My glory was in that van! So, I came up with a plan. It wasn’t very complicated. I just had to be fast! I bided my time. I waited until the Treasury guys lost their focus on me. I waited until another poor slob got too close to the police line and invited their attention, and then. . . I made my sprint for the van. I ran to left side of the stage, under the tape, across a short field and finally behind the first ambulance. It was then that I saw one of the Secret Service agents coming toward me. The van was only 100 feet away now. I made a break for it, running faster than I had ever run before. My track coach never could inspire that kind of running in me,

*“It truly was a great time to be a Ham!”*

but get chased by a federal agent once, and you’ll be amazed at your potential! The agent never had a chance, I beat him to the van by more than 10 seconds. The next time the van’s door opened, there I was, wearing my badge, and sitting with the rest of my post.

I told the 30-something agent that my dad had my badge all along and I was running because I was afraid of being late. He still wasn’t buying, but our com-leader smoothed things out for me, for which I’m still eternally grateful.

The event turned out just great. President Ford arrived by helicopter and we got to listen in to all the pre-landing military chatter. We heard a great speech. We assisted the park police in handling the crowds, the unprecedented traffic and in mobilizing three ambulances for medical emergencies. It was one of the most fulfilling Ham Radio activities I have ever participated in. It truly was a great time to be a Ham! Of course, I’m hoping by now the Secret Service no longer keeps a file on me. Now, if the IRS would just do the same! ■



Certificate of Appreciation

## Giving Back

Amateur Radio operators have long found giving something back an integral part of our game. We Hams frequently volunteer our time and skills. Giving back to the Ham Radio community is easy. In the United States, we can start with the FCC’s *Basis and Purpose of the Amateur Radio Service*—be a good operator. We should strive to advance our skills and assist others in the same pursuit—elmering. And, remember, Amateur Radio knows no borders—all the world is listening.

Mighty few of us don’t have a great story to tell of our earliest involvement in Amateur Radio—the defining moment you knew you had to earn a license. Here is a simple, low cost way to expose young people to

the service—purchase a new Ham Radio book for your local school’s library. It is possible a young student will discover what we already know, through the very book you donate.

A few months ago, the *K9YA Telegraph* reviewed a book by Lynn Barasch, *Radio Rescue*. This non-technical, picture book is ideally suited for elementary school students. Its purpose is not to license new Hams, but to whet a child’s appetite. Perhaps your low buck donation will be directly responsible for someone else’s lifelong interest in radio and science.

The *K9YA Telegraph* is also interested in your ideas. Contact us at: [telegraph@k9ya.org](mailto:telegraph@k9ya.org) ■



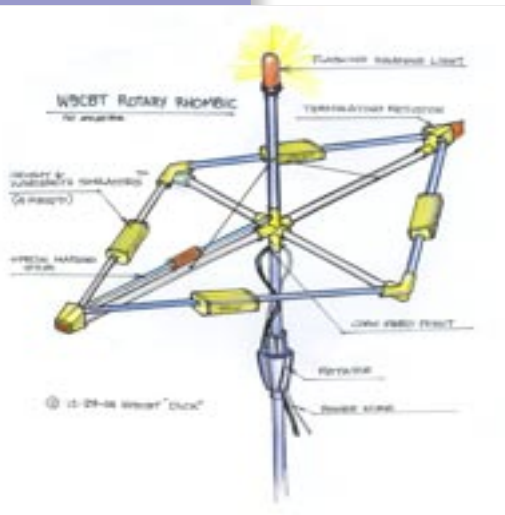
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# A Novel Rotary Rhombic Antenna

**Dick Sylvan, W9CBT**

BS, CKD, VHS, CD-R, DNR



Every Ham at one time or another has wished that he or she could own a rhombic antenna. Until now, these antennas were massive undertakings and only those fortunate few with much acreage, such as farmers, or those on big estates had the territory to do them justice. With the new W9CBT Mini-Rotary Rhombic Antenna that requirement is an anachronism. Using my proprietary wavelength/height simulator™ inserted between each tubular leg of the rhombic we can elec-

tronically simulate wavelengths of up to 20 wavelengths per leg and the height necessary for the antenna to work effectively.

Think of the enormous power gain! Imagine a rotary rhombic on 160-meters! No problem. The whole antenna is only 16 feet in length and is constructed of .75 inch diameter tubing for the elements and 1.5 inch diameter PVC tubing for the support frame, which makes it easy to set up for rotation. The elements are mounted on ceramic standoffs. Power for the wavelength/height simulator™ comes through a rotator cable/feedline connection. There is a control box for the antenna located in the shack that adjusts for the desired band and the wavelengths and heights desired. It also autotunes after the initial set-up and remembers previous band settings.

Assembling the W9CBT Mini Rotary Rhombic is a snap. A terminating resistor of 800 ohms is incorporated at the front of the antenna. This resistor stays in the circuit all the time because, as the antenna is rotary, it is not necessary to switch it in and out of the circuit to change antenna direction. The whole antenna weighs only 36 pounds and can easily be roof or chimney mounted.

The antenna is fed with standard 52 ohm coax. I have devised a unique matching device that allows the antenna, which normally requires 800 ohm open feed line, to be

fed close to the center of the antenna allowing rotation without hanging up. You can use RG8/U coax to feed this antenna. The wavelength/height simulator™ offers full band coverage from 160-10 meters, a very handy combination.

## Initial Testing

I assembled the first compact Mini Rhombic and tested it on 20-meters running 100 watts out. I did some field strength testing in the neighborhood and from two blocks away, burned out my field strength meter. A borrowed field strength meter was then used at one mile's distance. The new field strength meter displayed a reading up against the pin. Figuring a gain of 20 db, the effective radiated power is about 10 kilowatts.

I then attempted some on-the-air contacts. A short CQ with the antenna pointed toward the far east garnered an immediate pileup as dozens of Japanese stations frantically called. They did not believe I was calling from the U.S. and I heard one of them claim, "He's a Japanese bootlegger." One rabid Japanese DX operator offered his XYL in trade for my antenna (of course, I refused—my XYL would not be pleased). I then swung the rhombic toward Africa and caused a riot on the band. Most of the reports I received were 40 db over S9. Also, there is no noticeable TVI or BCI with the antenna.

*"Think of the enormous power gain!"*

I plan to market the W9CBT Mini Rotary Rhombic as a complete unit because of all the proprietary design parts I have incorporated into the design. I am not sure exactly when I plan to offer it on the market as I still have some of the parts in tooling and I have to determine final costs. I plan to do exhaustive testing on the antenna. I am also working on an indoor ultra-mini apartment dwellers version of the Rotary Rhombic (rotator included) that sits on your desk).

Look for me on the air with the W9CBT Mini Rotary Rhombic. Please be careful to turn down the RF gain on your receiver when you hear my signal as I cannot be responsible for any damage that may occur to your equipment. ■

## Rotary Rhombic Sketch



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# My J-38 and Radio Magic

**Rick Hiller, W5RH**

Back in high school, I owned a Lionel-made J-38 straight key. I used it for a “magic year” of shortwave radio (1969). I was a one-year novice, WN3OCV, with my Hammarlund HQ-180 Receiver; HX-11 Crystal-controlled Heathkit 20 watt transmitter, with two crystals; and a 40/15 meter dipole antenna. I have no idea where that original J-38 key is now. That was a long time ago up in three-land.

Recently, I loaned out a junk box J-38 to a Ham buddy so he could participate in the annual ARRL Straight Key Night. This particular J-38 had been given to me, along with a bunch of other electronic stuff, in 1986 by a non-Ham work colleague. This key sat in a closet until just recently

My buddy never participated in Straight Key Night but it piqued his interest enough to have him request I purchase one of the Japanese J-38 look-alike keys at the local emporium for \$16.95 and mount it on a base. I do all of his Ham Radio work, as he cannot, due to physical limitations.

I purchased the new J-38 clone, and that following Saturday morning got busy machining a base from aluminum stock. I polished the base, drilled and tapped mounting holes and put on some rubber feet. A nice “work of art,” I just hope he uses it.

It took about an hour to do that task, after which I thought about the old, tattered J-38 I brought back home from his house. It truly needed a cleanup. I had some spare time and I was in the garage, so within minutes I had it completely apart and was busy wire brushing all the brass and steel parts and painting the black oval base. Even the phenolic base got a good clean up with Armor-All.

Within no time at all I was fine-tuning the contact spacing and spring tension adjustment screws on my newly refurbished J-38. It looked great. So good, in fact, that I made up a cable in order to plug it into my

QRP transceiver. Of course, I then had to test it, so I fired up the rig and tuned to the CW portion of the band and sent a few... TEST, TEST DE W5RH.

While testing the key, I felt a strange, but familiar, feeling come over me. Looking down at that key, I could have sworn I was back in my bedroom, in my parents’ house, calling CQ DE WN3OCV on my original J-38. I somehow felt like a “real Ham” again, overcome with the “magic” of radio, that at one time, was the ether I traveled in.

That was four weeks ago I refurbished that J-38 and plugged it in. I am happy to report it remains plugged in and the iambic paddle has been relegated to the shelf. I am using the J-38 full time. Yes, my speed has been slowed to under 20-wpm, but I feel that with this key I have a “fist,” not just electronically produced, perfect dits and dahs. I control all the characteristics of my Morse code CW signal: the element length, the speed, the spacing. I am thoroughly enjoying my renewed, hand-key sending fist.

The J-38 takes me back to the days of rushing home from high school and getting on 15-meters, tapping out a CQ and then tuning the HQ-180 up and down the Novice band to see if anyone heard my call... yeah... there is someone calling me. Holy cow... a WN6... wow, California... all the way from Pennsylvania! Fantastic—this radio stuff really is magic. ■

*The refurbishing of antique and vintage Morse instruments is a multi-faceted undertaking. The Internet has many sites devoted to telegraph keys that offer information on their identification, care and preservation.*



**Rick Hiller's J-38**

*“... this radio stuff really is magic.”*



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# Beat Me Daddy, Eight to the Bar

*Do Try This at Home*

**Rod Newkirk, VA3ZBB/W9BRD**



**The Andrews Sisters**

Necessity is the mother of invention and the father of Morse innovation. Newer Radio Amateurs are mostly unaware that sustainable straight key speeds around 40-wpm are feasible. That's extreme CW.

The late Harry Turner, W9YZE, entered the Guinness Book

of Records by demonstrating just such a skill. Harry tickled his key alternately with either hand. Like touch-typing, after toiling through the laborious letter-by-letter stage, fully formed syllables and entire words automatically pop out of one's fingers.

Soon after I became licensed in the 1930s, a similar technique was adopted at W9BRD. This enabled me to join the faster crowd before I could save enough money to

buy a bug. Not many people had cash to spend on hobbies in Depression days. The same motivation must have inspired Turner. My own effort never reached W9YZE's expertise, but it did the job.

I particularly remember turning dozens of curious heads at the Chicago FCC office while qualifying for my Commercial Telegraph and Amateur Extra Class tickets. Nobody there had ever heard 30-per jump out of an ordinary old bolted-down pump handle from a cold start.

The exhilarating, rhythmic, high experienced in accomplishing smooth Morse transmission in the customary single-handed manner can be peculiarly enhanced by the two-fisted method. At higher speeds one need barely twitch a muscle, but at certain rates in the 20-plus range, physical flourishes occur that would make a big-band jazz drummer proud.

Both fists occasionally are exercised now at VA3ZBB, but rarely on ARRL's Straight Key Night. It would sound like cheating with a sideswiper, or a Vibroplex with a wobbly dots weight. Most important, the system severely inhibits itch-scratching and concurrent tipling. ■

## The J-37 & J-38

*Military Series of Keys Enjoy a Rebirth*

**Philip Cala-Lazar, K9PL**

The ubiquitous J-37 and J-38 series of keys enjoyed a long and illustrious history in the service of the U.S. military. The fact they were made by a number of contractors, including toy train manufacturer, Lionel, and Morse speed champ, Ted McElroy, makes positive identification difficult, and sometimes impossible.

Available as surplus in huge numbers following World War II, they were often the key aspiring Hams used to learn Morse; took their FCC code

sending test with; and then became their primary, and only, station key.

Two J-38s placed base-to-base were the basis for some early electronic keyer paddle designs. K6IX hosts a great Web site detailing the J-37 and J-38, it's well worth an extended visit. ■

<http://k6ix.net/J37Keys.html>

<http://k6ix.net/J38Keys.html>



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before they entered the space, “Do we know this guy/gal?” The hum of conversation included the articulation of DX and local call signs and the question on everyone’s mind as dictated by license class, “Do you think this is on the test?” One gent, oblivious to all around him and head buried deep in the ARRL license manual read line after line of sample questions, lips synchronized with forefinger.

### Steely-Eyed Examiners...

Once in the examination room, the legendary, steely-eyed examiners administered Morse sending and receiving tests; handed out test booklets, answer sheets and scratch paper; and checked test-takers’ calculators for formulae stored in memory. The examiners were informally referred to as the “older one,” the “younger guy” and other descriptive, freeform monikers. One thing they shared in common was their, to our eyes, lack of humor, unchanging countenances, adherence to the rules and no nonsense test administration—they were all “tough, but fair.”

They scanned the block-lettered copy of the Morse receiving test with care as we prayed for the requisite number of correct consecutive letters to earn a pass. For the sending portion, the text, sent on a well-worn J-38 straight key, described military maneuvers—the movement of armor and troops. During my General class exam, the examiner held up his hand after 10 or 15 seconds saying he had heard enough to grant a pass.

Successfully completing the code portion, candidates progressed to the written exam—concentrated silence broken only by the sporadic nervous cough, perplexed groan or hurried scrape of eraser against paper. We were well-proctored, official eyes upon us throughout, as we shifted and fretted our way through the questions. Handing back the test booklets and answer sheets, the answer key was superimposed and scores tallied.

Looking up from the graded exam and into the eyes of the expectant aspirant, the examiner revealed the results: those who heard, “You passed” were transformed as the heavy weight of doubt lifted. Those failing the exam bent perceptibly as they faced the reality of rerunning the day’s events one month from that moment.

### The Joys of Vitreous...

Test passed and temporary operating permit issued, we could now operate in formerly forbidden spectrum as “/CG.” The joy of passing could result in unexpected and

comical events. I was there when my great, good friend, Sy, WD9BFC (SK), passed his Advanced class examination, excused himself, and in dazed elation, discovered he was in the women’s restroom. Only the absence of a certain, wall-hung, vitreous appliance signaled the inappropriate locale.

The FCC no longer administers our exams, so the waiting area is gone. Some of the scenes depicted above are yet repeated in whatever part-time test sites local volunteer examiners can rustle up, however, I regret the passing of the waiting area. If those walls could speak what tales they would tell! ■

## Help Wanted

The K9YA Field Day Team is looking for a few good Hams! Positions available June 25-26 in Woodstock, Illinois.

**Satellite Operator** - If you have the skills and equipment to demonstrate a satellite contact, please join us.

**Non-Traditional Modes (APRS, ATV, SSTV)** - We are looking for experienced operators to supply equipment and expertise to demonstrate one or more non-traditional modes.

**Alternate Power** - Set-up, install and demonstrate solar or wind, battery charging system.

Contact us at: [k9ya@k9ya.org](mailto:k9ya@k9ya.org)

## MORSE TIPS & QUIPS



WHEN LEARNING MORSE CODE  
FIRST & FOREMOST—HAVE FUN!



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