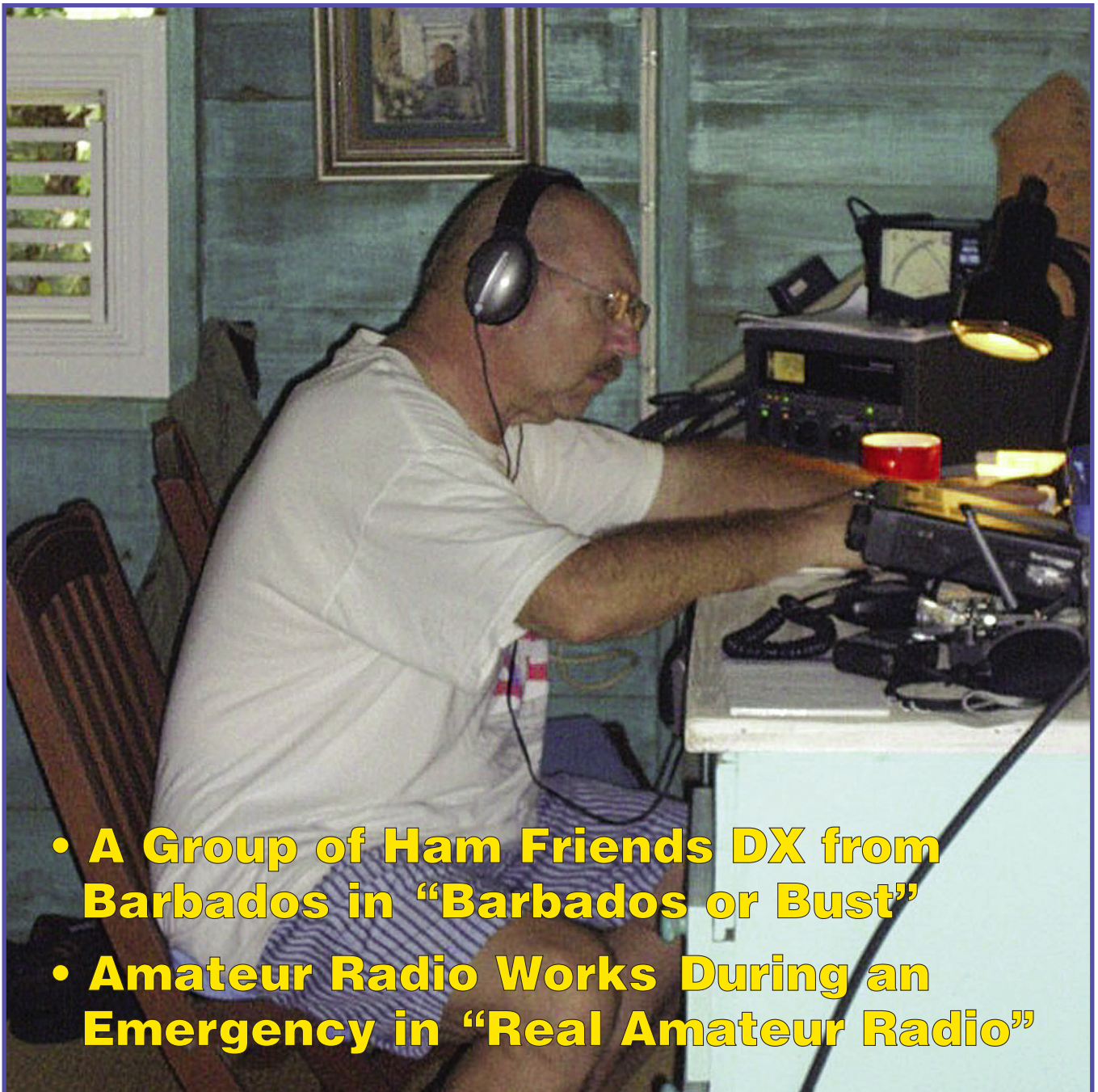


# WorldRadio

## ONLINE

Year 39, Issue 3

SEPTEMBER 2009



- A Group of Ham Friends DX from Barbados in “Barbados or Bust”
- Amateur Radio Works During an Emergency in “Real Amateur Radio”

*NEWS • FCC • DX • QRP • QCWA • CONTESTS • HAMFESTS • YL • AMSAT • CW*



## Region 3 Championships Cancelled

**P**olitical unrest in Thailand has led to the cancellation of a ham radio direction finding championship event in IARU Region 3, which encompasses most of Asia and the Pacific islands. Thailand, also known as the Land of Smiles, was scheduled to host those regional championships from October 29 through November 3 near Bangkok.

In the streets, the Yellow Shirts, supporters of the present government, are taking on the Red Shirts, who are loyal to the former Prime Minister. The Radio Amateur Society of Thailand was concerned about safety of competitors and spectators. Two of USA's best radio-orientees were planning to attend.

There is no time to schedule the Region 3 championships in another country. However, IARU Region 1, which includes Europe and Africa, is still planning to hold its ARDF championships from September 16 through 21 on the Black Sea coast of Bulgaria. That will be immediately after the Eighth World High Speed Telegraphy Championship at the same location. (Newsline)

## New Oregon Mobile Cellphone Law Exempts Hams

**O**regon House Bill 2377 prohibits driving while talking or texting on a hand-held cell phone. Once in force, drivers who violate the law could be fined up to \$90.

Like a similar law in California, the Oregon measure permits adult drivers the option of using a cellphone with a hands free system. Also like California, the Oregon law will forbid anyone to receive or transmit a text message while in motion. It also forbids drivers under the age of 18 from using any form of cellphone or texting device from a car in motion.

Oregon radio amateurs began a political drive to insure an exemption for mobile ham radio operations. In the version of the measure passed by both houses of the Oregon legislature their work was rewarded. In addition to hams, also exempt are those operating a motor vehicle while acting in the scope of employment as a public safety officer and people operating a motor vehicle while providing public safety services or emergency services as a volunteer. Also exempt are those using 11 meter Citizens Radio or UHF Family Radio Service two-way radio gear.

A spokeswoman for Governor Ted Kulongoski said he will sign House Bill 2377 into law. The effective date will be January 1st, 2010. (OregonLive, Oregon Legislative Website, Newsline)

## Michigan Ham Dies in Field Day Tower Collapse

**L**arry Prelog, KE4PM, of Niles, Michigan was helping to erect a thirty-foot high tower for the Blossomland Amateur Radio Association on Saturday, June 27th. He had climbed the tower when it collapsed under him. He was airlifted to the Borgess Medical Center in Kalamazoo where he succumbed to his injuries the following day. He was 57 years old.

A professional radio technician by trade, Larry Perlog was most recently employed as a telecommunications specialist for Lakeland Regional Health Care System. Throughout his career

performed many tower climbs and was considered as being one of the most safety conscious climbers in the business. A family member described him as being very meticulous about being safe.

The Blossomland Amateur Radio Association is accepting donations to help the family. Its address is PO Box 175, St. Joe, Michigan 49085.

(South Bend Tribune, others)

## License Clerical Error Fixed

**B**ack this past April 28th, the W5YI Volunteer Examiner Coordinator sent an electronic data file to the Commission requesting that Howard Schmidt's operator license for amateur Station WB7NUV be modified to upgrade from Technician Class to Amateur Extra and requesting a new sequential call sign. Based on this application, the Commission granted an Amateur Extra Class amateur service operator license on April 28th and assigned him the call AD7ZS.

June 16th, W5YI VEC notified the Commission that it had made an error in the April 28th data file and that Schmidt had not qualified for an Amateur Extra Class operator license. The W5YI VEC asked the FCC to modify Schmidt's license to correct the operator privileges authorized. As a result of this information the regulatory agency proposed to modify the license to show Technician Class operator privileges, and to replace call sign AD7ZS with call sign WB7NUV.

The Order Proposing Modification was released on June 25th. Schmidt was given time to comment and appeal. On June 30th Schmidt informed the Commission that he did not object to modifying his license to show Technician Class operator privileges, but wished to retain his subsequently assigned call sign W7HAS.

On July 7th the FCC modified Schmidt's license for station W7HAS by replacing Amateur Extra Class operator privileges with Technician Class operator privileges but permitted the Issaquah, Washington ham to keep the W7HAS vanity call. (Newsline)

## MIT Announces New Cognitive Radio Chip

**E**ngineers at the Massachusetts Institute of Technology have built a fast, ultra-broadband, low-power radio integrated circuit chip modeled on the human inner ear that could have applications in cognitive radios.

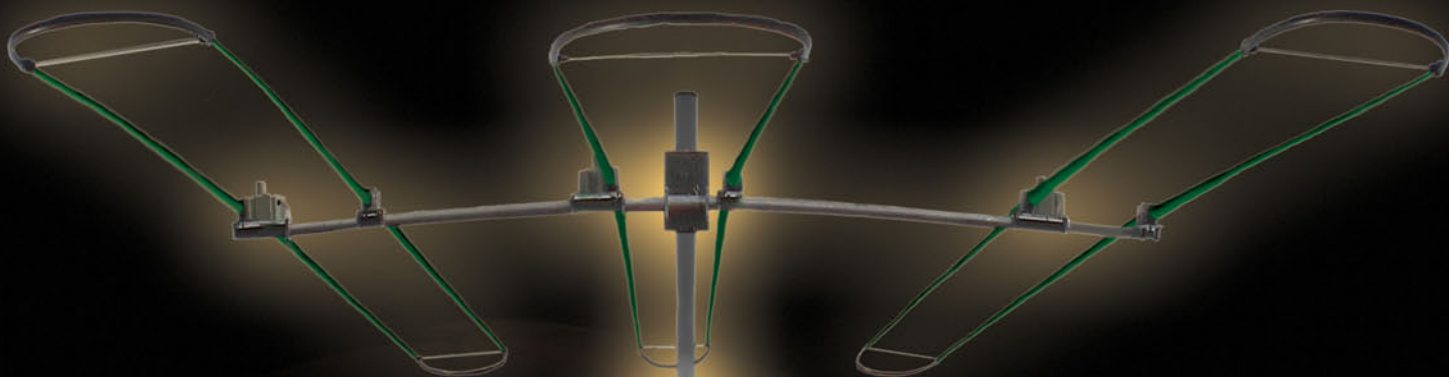
Researchers say that the new RF cochlea is embedded on a silicon chip measuring 1.5 mm by 3 mm and works as an analog spectrum analyzer by detecting the composition of any electromagnetic waves within its perception range. They say that the new chip could enable wireless devices capable of receiving cell phone, Internet, radio, television and other signals using a single device.

The term cognitive radio is a paradigm for wireless communication in which either a network or a wireless node that changes its transmission or reception parameters to communicate efficiently avoiding interference with other spectrum users. More about the new radio chip is on-line at [www.sciencedaily.com/releases/2009/06/090603131441.htm](http://www.sciencedaily.com/releases/2009/06/090603131441.htm) (Science Daily, others)

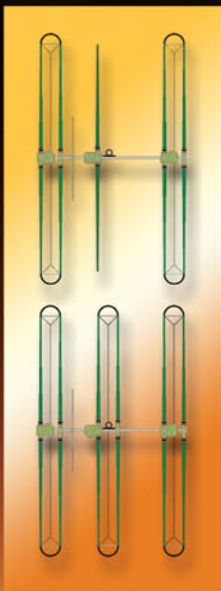


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# WorldRadio

## ONLINE

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#### ON THE COVER

Frank, W2XYZ, trying to work VK's shortly after sunrise using CW.





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**ICOM**



In my capacity as editor of *WorldRadio* (now *WorldRadio Online*) magazine for the past half dozen years, I have been fortunate to be able to visit many different Field Day club sites. This year I stayed close to home and stopped in at my local club, as well as a Field Day site located about 40 miles away, which I had found on the internet. The differences between the two sites couldn't have been more startling.

The local club boasts a membership of nearly 100. They are active in Skywarn, Operation C.A.R.E. and provide 2-meter communication at community events. They have a monthly newsletter and their meetings have a good turnout. However, only two members were at the Field Day site when I showed up and one of them works at the site. They were using a rig of one of the members, who had to do the packing, unpacking and put up the antenna by himself.

When I pulled into the site of the other club's Field Day, I was surprised to see it packed full of cars, people, trailers, tents, rigs and antennas. The tables were overflowing with food brought by the members and their spouses. Those not operating were sitting around the picnic tables, eating and visiting.

This disparity in attendance is a phenomenon that I have noticed over the years. At first, I thought low attendance was due to some clubs just being more focused on 2-meter operation than HF-operating. Or they were less social. But, that isn't the case. People wouldn't attend ham club meetings if they didn't want the social contact. Perhaps the lack of attendance at Field Day was due to a lack of HF-active hams. Maybe. However, hams, generally speaking, are interested in finding out about unfamiliar modes, especially in a non-pressure situation like Field Day.

After visiting dozens of Field Days, it finally dawned on me. The one common thread running through the successful vs. non-attended events is the availability of food! Hams will go where the food is. Some hams only go to the meetings for the coffee and doughnuts.

At Field Day, even if the club members just show up with the intention of having lunch or dinner, they tend to sit while they eat. This lends itself to visiting with fellow hams. They linger while chatting and before long, you have a crowd. They may not all be operating, but a few might, at least long enough to give it a try and say they did it! Moreover, the next time they have the opportunity, operating HF won't be as intimidating. Next year at Field Day, they will remember their positive experience and will be more willing to come to operate and perhaps help set-up or takedown the site.

Most club budgets can afford the fixings for a pot of chili, some hot dogs and potato salad. Toss in a few bags of chips and snacks and you have the start of a buffet that a ham cannot resist. If none of the club members can cook, enlist the assistance of a couple spouses. Don't make them feel like galley slaves; make sure they are treated as members of the group. Getting the family involved in club activities will help create good will. To paraphrase the famous line from the movie *Field of Dreams*: If you cook it, they will come. Try it at your next event and I bet the attendance and morale of the members improves.

73 88 33, Nancy Kott WZ8C

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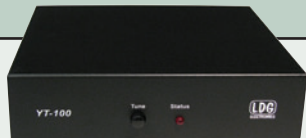




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**AT-1000Pro Review  
in Nov. '08 CQ**



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## Z-11Pro

The Z-11Pro, designed from the ground up for battery operation. Only 5" x 7.7" x 1.5", and weighing only 1.5 pounds, it handles 0.1 to 125 watts, making it ideal for both QRP and standard 100 watt transceivers from 160 - 6 meters. With an optional LDG balun, it will also match longwires or antennas fed with ladder-line. All cables included. **Suggested Price \$179**



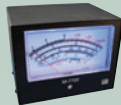
## NEW! Z-817

The ultimate autotuner for QRP radios including the Yaesu FT-817(D). 2000 memories cover 160 through 6 meters. The Z-817 will also function as a general purpose antenna tuner with other QRP radios. Powered by four AA internal Alkaline batteries (not included), no additional cables required. A coax jumper cable is also included for fast hook up. **Suggested Price \$129.99**



## AT-100Pro

Covers all frequencies from 1.8 - 54 MHz (including 6 meters), and will automatically match your antenna in no time. It features a two-position antenna switch, allowing you to switch instantly between two antennas. The AT-100Pro requires just 1 watt for operation, but will handle up to 125 watts. All cables included. **Suggested Price \$219**



## FT Meter NEW! FTL Meter NEW! M-7700

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**NEW FTL Meter** For Yaesu FT-857(D) and FT-897(D). 4.5" face with calibrated scales for signal strength, discriminator reading on receive, and power output, SWR, modulation, ALC action and supply voltage on transmit, all selectable from the radio's menu. **Suggested Price \$79.99**

**NEW! M-7700** For IC-7700. It will display S-meter on receive, or power out, SWR, ALC level or supply voltages, all selectable from the radio's menu. What's more, the M-7700 and the virtual meter on your radio can work together. **Suggested Price \$79.99**



## AT-1000Pro

The AT-1000Pro has an Automode that automatically starts a tuning cycle when the SWR exceeds a limit you set. Operates at any power level between 5 and 1,000 watts peak. RF Relay protection software prevents tuning at greater than 125 watts. Tunes from 1.8 to 54.0 MHz (inc. 6 meters), with tuning time usually under 4 seconds, transmitting near a frequency with stored tuning parameters, under 0.2 seconds. 2000 memories. 2 Antenna connections. All cables included. **Suggested Price \$599**



## NEW! IT-100

Matched in size to the IC-7000 and IC-706, the IT-100 sports a front panel push-button for either manual or automatic tunes, and status LEDs so you'll know what's going on inside. You can control the IT-100 and its 2000 memories from either its own button or the Tune button on your IC-7000 or other Icom rigs. It's the perfect complement to your Icom radio that is AH3 or AH-4 compatible. **Suggested Price \$179.99**



## NEW! KT-100

LDG's first dedicated autotuner for Kenwood Amateur transceivers. Easy to use - just right for an AT-300 compatible Kenwood transceiver. Has 2,000 memories for instant recall. If you have an AT-300 compatible Kenwood radio, you can simply plug the KT-100 into your transceiver with the provided cable; the interface powers the tuner, and the Tune button on the radio begins a tuning cycle. The supplied interface cable makes the KT-100 a dedicated tuner for most modern Kenwood transceivers. **Suggested Price \$199.99**



## NEW! Z-100Plus

Small and simple to use, the Z-100Plus sports 2000 memories that store both frequency and tuning parameters. It will run on any voltage source from 7 to 18 volts; six AA batteries will run it for a year of normal use. Current draw while tuning is less than 100ma. The Z-100Plus now includes an internal frequency counter so the operating frequency is stored with tuning parameters to make memory tunes a blazingly fast 0.1 seconds; full tunes take an average of only 6 seconds. **Suggested Price \$159.99**



## AT-200Pro

The AT-200 features LDG's new "3-D memory system" allowing up to eight antenna settings to be stored for each frequency. Handles up to 250 watts SSB or CW on 1.8 - 30 MHz, and 100 watts on 54 MHz (including 6 meters). Rugged and easy-to-read LED bar graphs show power and SWR, and a function key on the front panel allows you to access data such as mode and status. All cables included. **Suggested Price \$249**

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# Barbados or Bust

By Frank Wroblewski, W2XYZ/8P9FW

A nice view from our yard. Our cottage was located on a cliff similar to our neighbor's house as shown in this picture.

**W**inters in New Jersey are wonderful, if you like being cold or enjoy shoveling snow. It's not all bad though, as it does allow plenty of time to play with radios. Personally, I would prefer somewhere warmer with beautiful beaches, sailboats, and palm trees in addition to radios. Usually excursions to such exotic places occur frequently for me, but only in my non-waking hours. This year it was different. It actually happened. Yes, warm sunny beaches, sailboats, palm trees and of course, my favorite hobby, amateur radio.

My good fortune began in the summer of 2008. My friend and fellow club member, Joe, W2KQ, worked Peter, 8P9NX, who lives in Barbados, on 40 meters using CW. They had a nice chat and one thing led to another. Joe commented about how nice it must be to operate from such a great DX location as Barbados. Peter said something to the effect of, "Well, why don't you come down here and operate for awhile?"

They exchanged email addresses and that's what got the ball rolling. Peter and Joe carried on a number of conversations concerning everything from living conditions to antenna layout. When the details seemed feasible, Joe announced to fellow NADXA (North America DX Association) members the opportunity before us. If we were interested, Peter could arrange to rent a cottage for us overlooking the ocean, but more importantly, it was ham-friendly with a large lot next to the cottage...just perfect for putting up several good antennas.

To make things even better, Peter agreed to erect all the antennas and set up his equipment for us to use at the cottage. He also said he would do the legwork in obtaining licenses, arrange for renting a car; pick us up at the airport and everything else one would need to make a perfect mini-DXpedition-vacation. Joe's



(Left to Right) Mike KC2Q/8P9MD and to his right is our host at Barbados, Peter 8P9NX/W0SA. Along side Peter is Rod, a member of the Barbados Radio Club. On the right side of the picture is the author, Frank W2XYZ/8P9FW.



words barely left his lips before I jumped up and said, "I'll go." NADXA president, Mike, KC2Q, was also interested in this expedition. Mike and I had gone to Anguilla the year before as guests of John, KB2MQL, and we thoroughly enjoyed ourselves. We both knew this would be more of the same. The four of us, Joe, Mike, Peter, and I worked out the details via email. Peter would rent "Turtle Cottage" for us to use from February 15 to February 22. He told us not to worry, as he would have everything ready for us.

Our journey began with Joe departing from Newark Liberty Newark Airport. I was in Florida visiting my daughter Cindy, N4CDF, prior to our trip. Mike is allergic to lousy weather, so he spends his winters just outside of Disney World. Mike and I met up at Hamcation®, a major hamfest in Orlando.

We drove to Miami and flew from there to Barbados. Although Peter was providing everything we could possibly need, I just had to take along a bunch of radio stuff...to be on the safe side.

### Coffee Break?

The people at the Miami airport were very pleasant. Even the TSA personnel were cordial; at least until my suitcase went through the X-Ray machine and the officer saw rectangular boxes with wires attached, he became noticeably attentive. Actually, he screamed. "Who's-bag-is-this-what-is-this-stuff-I-need-assistance-over-here." I stepped forward, which was very easy to do, since all the other passengers moved far away from my suitcase. I said, "That's my bag officer. That's amateur radio equipment you are seeing in it." Before the FBI and bomb-sniffing dogs arrived, he took me off to the side with the suitcase. Visibly shaken, he asked if it is all right to open the suitcase. I said, "Sure, let me get it for you." "No!" He shouted. "You stand right there, I'll open it myself." Once opened, he became much more relaxed seeing the contents were I as I said they would be. Regardless of the harmless appearance of an Icom IC-706 and related items, he wiped each one with a circular patch that then went into a machine. Each time the light on the machine turned green, he became more relaxed.

I thought things were going well until he spotted a bag of coffee. There was a change in his voice. He said, "What is that bag?" I replied, "That's coffee, officer. Dunkin' Donuts coffee for our breakfast." He said, "I see what it says, but what is in the bag?" "Coffee, just coffee."



Frank, W2XYZ, working stateside and Europeans using PSK-31.

fee." He asked if I had any objection to him testing the bag. He said, "We'll have to test this one differently. Test it in water." "Okay with me," I replied. "Water, very hot water. Maybe even with cream and sugar." A smile came across his face. I began to laugh. We both laughed. I departed Miami with Mike, my mysterious suitcase and the bag of coffee. We arrived in Barbados a couple of hours later.

We expected to meet Joe at the airport. He was supposed to pick us up in the rental car. After processing through cus-

toms, Mike and I looked around for Joe. The airport is small by New Jersey standards, but still there were so many faces and none of them looked like Joe. Mike said, "There, over there." I said, "Where? I don't see him." He said, "Over there, see the woman holding up a QSL card. I'll bet that's for us." Sure enough, Mike was right. The QSL belonged to Peter and the woman holding it was our new landlady, Pat. She apologized for Joe not being there to meet us, but she offered to get us as the way to the airport is tricky at night and Joe seemed tired after the flight.



Two of our four vertical antennas we used at Turtle Cottage. Peter had the antennas erected, coax run and radio set-up for us before we even arrived. It was truly plug-and-play due to Peter's generous hospitality and sincere concern that we had a great time in Barbados.



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Naturally, we thanked her for picking us up and told her we were glad she was able to be there. We learned Pat is a retired schoolteacher from England who resettled in Barbados and has a couple of small cottages she rents to tourists. Peter and his wife are former tenants of Pat's cottage and over the many years have become good friends. Joe greeted us when we arrived at Turtle Cottage. He asked how the flight was. Mike said, "Wonderful." I said, "Don't ask." After a brief tour of our station, we settled in for the night.

I awoke to scattered sunlight broken up by wavering palm fronds, the gentle roll of ocean waves and the smell of Dunkin' Donuts coffee being tested in very hot water. After pinching myself – twice -- I got out of bed. Joe and Mike were just coming back in the cottage from inspecting our antenna field.

## Field of Dreams

Joe said, "Wow Frank, you've got to see the antennas Peter put up." I went outside and walked past several large turtles eating their 'veggies'. So that is why they call it Turtle Cottage, I said to myself. I went next door where the antennas were erected and found Peter had put up four vertical antennas, complete with counterpoises for us. One was a 160m, another for 80m, a 40m vertical and a multi-band vertical. Going back in the house, I met "Scampy." Scampy is a stray dog Pat rescued and has become the official watchdog and mascot of Turtle Cottage. She loves laying on a cool rock between the aloe vera plants, where she keeps a watchful eye on her charges of South American Red-Legged turtles.

Inside the cottage, Mike called "CQ this is 8P9MD," and the world responded. When he was hoarse, Joe got on the radio using CW as 8P9KP and I used the call 8P9FW. We, too, found out the world was waiting to talk to us. We worked pile-ups all day long and when early evening came, Mike got on 60 meters. As far as we know, no one has ever used 60 meters in Barbados. Mike told us so many operators were thrilled as this was their first 60-meter QSO with Barbados. The high point of our contacts were the ones we made with our friends back home and with the club station of GSARA (Garden State Amateur Radio Association), of which we are also members.

As stated earlier, this trip was also a vacation. We didn't spend day and night on the radio as is often done on DXpeditions. We went to the beach, sailed with Peter, visited the Barbados Amateur



**A picture taken at the Barbados Radio Club, 8P6AW. Notice the similarity of the call to W1AW? It's no accident. Hiram Percy Maxim (1AW, W1AW) was a frequent visitor to the island of Barbados and used an early version of the call 8P6AW while on the island. Years later, the club adopted his call for their club station callsign.**

Radio Club (8P6AW), and ate in great restaurants and of course, we went sightseeing. Driving in Barbados is on the left side of the street. I was elected to drive because I had experience driving on the left side of the road from when I was in Anguilla, the year prior. I think the real reason I was elected driver is that the driver had to refrain from tasty island drinks.

One morning we decided to do a little sightseeing before getting on the air. Equipped with two very detailed road maps, we headed out past the airport to a quaint fishing village named Oistins. It's just a few minutes down the road and Peter had given us instructions on finding this town. His route was perfect. We enjoyed ourselves there and took in the many interesting sights such as the fish market where their primary product is flying fish (really!). We decided to head back home and quickly discovered Barbados has no street signs. Our maps were well marked with the names of all the streets and highways, but no one ever erected street signs on the corners.

We were hopelessly lost. Using the sun as a guide, we tried to follow our way back home. About two hours later, we realized that wasn't working, so we decided to drive around the perimeter of the island. Eventually we'll get back home. We did make it back home in time for supper and had a wonderful dinner at a great restaurant with Peter and his wife. We had many stories to tell about the sights we saw along our sojourn. Confidentially, we confessed to Peter that we had to ask for directions. He asked if the locals were friendly. Yes, yes, we chimed together,

very friendly and very helpful. The directions were a bit unusual, but accurate. "...drive down this road until you see a yellow house with a brown dog in the yard. Make the next turn right but don't go further than the 'Carib' sign..."

We asked Peter why they don't have street signs in Barbados. He replied, "Because everyone here knows where they are going." I suppose Joe and Mike would have done a better job of navigating had they been more relaxed and able to keep their eyes on the map instead of the road. I made a couple of little mistakes. For example when I pulled out of the shopping center, I turned left and moved to the right side of the street. "AAAAAAGHHHH! Move to the left." "Oh yeah," I said as I moved out of the path of the oncoming truck. Really, when you have been driving over forty years on the right side of the road, it is hard to remember to stay left. Later I heard a similar scream. "Move, move, move. Frank, get on the other side." Oops, I forgot again. This time it was only an oncoming taxi. I said, "See, I'm getting better, it wasn't a big truck this time."

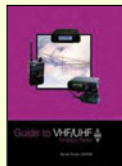
Our week in Barbados passed all too quickly. Peter and his wife were absolutely wonderful to be around. Peter did much more for us than I could express in this article. Pat was a terrific landlady. She made us laugh, showed us around and taught us much about the local area. The local people we encountered were always friendly, helpful and extremely courteous. I'd love to go back to Barbados. Joe and Mike expressed the same sentiment. They did suggest if we go back, that I not take my radio gear to the airport. HI HI



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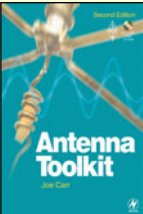
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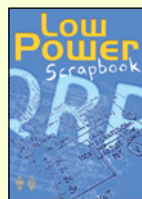
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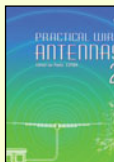
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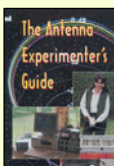
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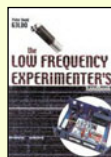
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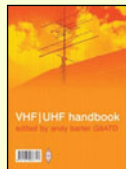


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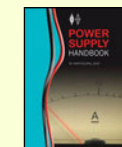


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# Real Amateur Radio

by John C. McGrath, N9AMI

When the cell phone rang on the night of January 13, 2009, it was Teresa, my uncle's wife. She stated her father was in a very serious accident in Atlanta and needed to leave her home in Las Vegas that very night. She was calling me because her husband, Dan, who is my uncle, was working in Guyana, South America. Dan was not reachable by any means other than ham radio. I copied her message and told her I would try to get the information to him during our scheduled contact the next morning.

As luck would have it, I talked Dan into trying digital modes before he left for his month-long trip to South America. He runs a very conservative setup and even with my KLM beam, I have trouble hearing him on SSB. So, on prior days using the new digital setup, I would get about 60 percent copy on PSK31 or Olivia. And he was hearing me 100 percent with my 50 watts. His radio (an 897) was damaged and only putting out 15 watts.

The morning of trying to pass the emergency traffic to him, I got on a few hours early just in case conditions were favorable. I kept sending "his call de mine Dan I have emergency traffic for you." I tried Olivia, PSK31 and CW repeatedly for a few hours when finally, I got his call back on Olivia - that was all. His signal was so weak it was amazing I received anything, but I did know he was there. So I sent the following messages:

**Message One** - Dan your xyl called and your father in law was in a serious accident and is in critical condition recommend get to satellite phone ASAP. End of Message One Break.

**Message Two** - I left you an msg earlier John....before we got results of CT scan. Prognosis has changed drastically. They've never seen such massive facial trauma, every bone was literally crushed. If he survives it would take massive reconstruction which I'm not sure he would want to go through. But they are saying he's got about a 10% chance. There is blood on the brain and heart and lung contusions so massive they may not heal. If he can make it thru the next 72 hrs...it will improve his odds. Tell Dan I love him and need him badly right now...but I realize he's in a position where he may not be able to be here. In any case....I'm not sure what's going to happen...I'm trying to prepare myself for the worse and hoping that the Lord will touch him and save him....because I'm not ready to let my daddy go yet. Tell my husband I'm sorry I can't be more definitive as to what the future holds and I miss him terribly and need to feel his loving arms holding me. End of Message Two Break.

Dan again recommend call her on sat phone ASAP  
Please confirm receipt of message.

I never did get a confirmation although I am sure he tried, but his signal was very weak. I sent the same message in CW and PSK again to make sure. That was all I could do. I hoped that he was getting the same kind of signal reception that he did in the prior days.

The following morning I left a voice mail for his wife, Teresa, and asked if Dan contacted her. Later that day I got a call from

*"In my eyes, this is what real amateur radio is about. Keeping in touch with family out of country and being able to pass some emergency traffic along"*

Dan and he said he just arrived in Atlanta. He received the messages the first time. As luck would have it, the plane that comes in once a week had just left when he got my messages. They were able to recall the supply plane and Dan got a ride to Jonestown, and then got a flight to Atlanta. If he had not received the messages at that time he would have not been able to leave for at least a week. Moreover, if we had not setup communications, he would not have known a thing until he got back to Jonestown three weeks later.

In my eyes, this is what real amateur radio is about. Keeping in touch with family out of country and being able to pass some emergency traffic along. I will say I am not involved and have no interest in ARES or RACES type organizations but I now have a better respect and understanding of the importance of the folks involved with emergency-type organizations.





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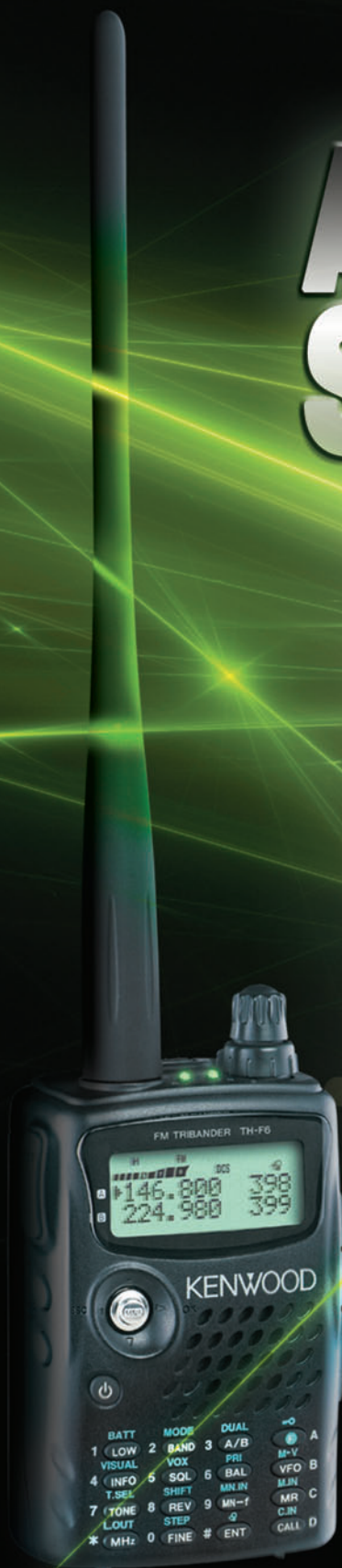
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## The Rules Say...

John B. Johnston, W3BE

### VANITY SCRAMBLE

**Q** I was the holder of a W4 call sign for over 20 years. Due to a move to W0 land, I had to change my call sign based on the rules then in effect. Now I am back in W4 land and would like to obtain my original call sign. Its most-recent holder let his license expire last year. I applied for it under the former holder provision, but was denied. Does this mean that I will have to wait out the entire two years from its expiration and apply for it under the first-come-first-served scramble without any allowance for being a former holder?

**A.** Yes, you will. What is sometimes overlooked here is that Section 97.21(b) says that a person whose amateur station license grant has expired may apply to the FCC for renewal of the license grant for another term during a two year filing grace period. The person who allowed the license grant to lapse, therefore, has the two year grace period in which to renew. It won't be available for vanity assignment until it shows a canceled date on the ULS.

So, the only way for your former call sign to become obtainable to you - as a former holder - prior to it becoming available under the first-come, first served "by list" provision would be for it to become unassigned. Should the most-recent holder pass away, for instance, a request to the FCC with proof of death would do it. Maybe a request for cancellation of the license from its most recent holder would suffice.

**Q.** I hold an Advanced Class operator license. About 18 months ago, the ham who acquired my deceased father's long-time 1X2 call sign moved to another call sign region and acquired a different call sign. What must I do to obtain my father's old call sign?

**A.** Act promptly! Time is running out for you to take advantage of your close relative priority. When the most-recent holder relinquished the call sign, the two-year wait period began, after which the call sign will become available under the first-come, first-served "by list" provision in the vanity call sign system. See Section 97.19(c)(2). As a close-relative of the deceased, however, you are eligible to apply before that occurs.

But first, you must tend to the matter of upgrading. That call sign is in Group A and, as such, can be assigned only to a station whose licensee holds an Amateur Extra Class operator license grant.

**Q.** I know we are not permitted to use obscene speech on the air by the FCC. The FCC rules, however, require us to identify our transmissions with our call signs. They are, therefore, obviously part of the speech we must make over the air. At least three hams have intentionally applied for obscene vanity call signs. What is the FCC's policy and practice regarding this?

**A.** On its information page for call sign systems, the FCC discloses its policy and practice for this topic where it says in pertinent part: Objections to the assignment of requested call signs will not be entertained at the FCC. However, this does not hamper any party from asserting such rights as it may have under private law in some other forum.

Section 97.119(b)(2), moreover, encourages the use of a phonetic alphabet as an aid for correct station identification by a phone emission, which may help avoid the use of letter combinations others may find objectionable.

**Q.** The station call sign and station license are no longer assigned to any specific location, as they once were. If there are 10 hams at a club meeting, can each sign his or her call sign at the club station?

**A.** Yes. See BE Informed No. 4 WHICH CALL SIGN?

*W3BE-O-GRAM:* Your club station license trustee, however, would have the final say about your use of club apparatus.

**Q.** In the awards column was an announcement of an award for working stations located in U.S. or State historic parks. It indicates "stations worked may be fixed-mobile or portable in the park." Unlike most of the rules, Section 97.13 tells me nothing specific about what is allowed and what is prohibited, and what needs to be done to be able to operate, as it refers to Section 1.1305-1.1319. I have been unable to find the detail text of these "prescribed actions" to see what the requirements are, but the scuttlebutt I have heard indicates a lot of paperwork and time to get permission to operate on such land. I can understand that if I were to set up a permanent station, but what if I want to operate my HT or other portable as I visit the site as a tourist?

**A.** Section 97.13 places restrictions on station location. Paragraph (a) says: Before placing an amateur station on land of environmental importance or that is significant in American history, architecture or culture, the licensee may be required to take certain actions prescribed by Sections 1.1305-1.1319.

Those sections are in Part 1 - PRACTICE AND PROCEDURE Subpart I - Procedures Implementing the National Environmental Policy Act of 1969. Section 1.1305 says that for actions which normally will have a significant impact upon the environment, Environmental Impact Statements must be prepared. Any FCC action deemed to have a significant effect upon the quality of the human environment requires the preparation of a Draft Environmental Impact Statement and Final Environmental Impact Statement. The FCC has reviewed representative actions and has found no common pattern which would enable it to specify actions that will thus automatically require Environmental Impact Statements. Section 1.1307



delineates those actions for which applicants must submit environmental information.

**W3BE-O-GRAM:** Consult with the park authority as to what is considered to be land of environmental importance or significant in American history, architecture and culture therein. Ask for advice on how your station's presence within the park could avoid impacting negatively upon the quality of the human environment.

**Q. The rules prohibit broadcasting and transmitting music. But, what about the incidental pick up of music in the background? Does a radio club turn down providing public service communications for an event just because there might be a band or loud DJ in proximity to a ham rig during a transmission?**

**A.** Section 97.113(a)(4) means just what it says: No amateur station shall transmit music using a phone emission except as specifically provided in Section 97.113(e): ...communications, including incidental music, originating on United States Government frequencies between a manned spacecraft and its associated Earth stations. Prior approval for manned spacecraft communications retransmissions must be obtained from the National Aeronautics and Space Administration. Such retransmissions must be for the exclusive use of amateur radio operators.

**W3BE-O-GRAM:** If your operational inclinations require a rule amendment, please do not ask for a "how-to" rule.

**Q. Section 97.5(b)(2) says that a club station license grant may be held only by the person who is the license trustee designated by an officer of the club. Who is that officer of the club responsible for designating the license trustee?**

**A.** That's for the club to decide.

**Q. I am involved with a small radio club in a middle school. When there is a youngster operating while I am the control operator and a DX station answers him from a country which with we have no third party agreement, do I take the mike away from him and become the operator?**

**A.** While you are the control operator, you are the one and only "operator;" anyone else is a third party. Section 97.115 says, in pertinent part: An amateur station may transmit messages for a third party to any station within the jurisdiction of any foreign government whose administration has made arrangements with the United States to allow amateur stations to be used for transmitting international communications on behalf of third parties. No station shall transmit messages for a third party to any station within the jurisdiction of any foreign government whose administration has not made such an arrangement.

**W3BE-O-GRAM:** See BE Informed No. 7 ALL ABOUT THIRD PARTY COMMUNICATIONS. This report is a tutorial for instructors and others who want to really understand what third party communications is all about. Also see BE Informed No. 25 WHO MUST THROW THE BIG RED SWITCH? It is a collection of long-running questions about third party communications and transmitter activation.

## APPRECIATION



### Our R&R Superham-of-the-Month...

Month is Vic Culver, W4VIC, remarkable Secretary of our Tidewater QCWA Chapter No. 119. Thank you, Vic, for the fabulous QCWA Virginia Beach national convention and for the great work you are doing with The QCWA Journal in its reading for blind members program.

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# Flashback to the '60s: The Rare and Renowned PRC-64 'Spy Radio'

By Richard Fisher, KI6SN

**T**he always-interesting World of Ideas column by Dave Ingram, K4TWJ, in the June edition of *CQ Amateur Radio* magazine had a scrumptious buffet of items on radio operation when you're out-and-about: "Mobilizing 2009 – Part I: Bikes, Cars, Back Packs."

It was that last part – back packs – that really caught our attention at KI6SN. Pedestrian mobile has always been a fascination, but two photographs and 'TWJ's short narrative on a Vietnam-era radio being operated Paul Signorelli, W0RW, were of particular interest.

Just a few days before the magazine had arrived we'd had the pleasure of hearing one of these transceivers in action on 40-meter CW, thanks to Jerry Fuller, W6JRY, of Forest Ranch, CA. I was awestruck as he casually went into detail about his "spy radio," the PRC-64.

This rare and renowned field rig is a self-contained solid state 5-watt CW and AM transceiver designed in the 1960s by the Delco Corp., for use by military forces in Vietnam. According to documentation, it covers 2 to 7 MHz in four crystal channels. There's a built-in straight key and provisions for a battery pack.

The PRC-64's controls are on the top of the chassis, in classic trail-friendly radio fashion.

"About 7 or 8 years ago I got interested in building a Mark VII Paraset spy radio and asked Lee Hutchins, KA6IRL, a friend of mine, if he would like to work with me on the project," 'JRY recalls. "He was interested in military portable radios, just like myself.

"We went on to building four of them and we also collaborated on another British radio project – the Mark III."

Coincidentally, "Lee had two PRC-64s sitting around that he had purchased about 15 years ago and had never tried to get them on the air," 'JRY said. "About six months ago he brought them over and dropped them on my bench. He said if I could get them working I could have one. He also had the manual for them.

"One of the radios was in like-new condition and the other one was 'fair to good.'



**A recently restored PRC-64 Vietnam-era "spy radio" sits on the bench during testing at W6JRY.**

"The first step was to get a bench power supply that would put out 4, 12, and 24 volts, as the PRC-64 used a dry battery pack with these voltages. As luck would have it, a friend of mine had a triple output power supply he had gotten at a swap meet some years ago. I swapped with him and was able to get the required voltages out of it," 'JRY continued.

"I made up a plug fixture with a handle on it to plug into the PRC-64 battery box. The transmitter and receiver are both crystal-controlled and I ordered crystals from JAN.

"I chose an operating frequency of 3560 kHz and 7030 kHz."

When the crystals arrived, 'JRY "was now able to troubleshoot the radios and tune them up to the operating frequencies I'd chosen.

"The newer PRC-64 had one or two problems, but came right up. The older set took awhile – replacing some of the electrolytic



capacitors. And it will only put out 3 watts on the 40-meter band.

"It seems a lot of the other sets, although rated up to 6 MHz, will put out the full 5 watts on 40 meters.

"I built a battery pack out of double sided printed circuit board material – the same size of the original dry battery pack. I used Radio Shack battery holders for 20 NIMH rechargeable 1.2-volt AA batteries and tapped them" for the proper voltages.

"I also put in diode protection in case of getting any batteries reversed. After getting the sets operational, I gave Lee his and started operating mine on 40 meters."

As of late May, 'JRY said his "farthest contact so far is Vermont. I have only made one test contact on 80 meters with a friend of mine about 70 miles north of me, and will likely do more on 80 meters this winter.

"I also would like to get it out and use it portable this summer. The PRC-64 is a hard radio to find in the U.S. It seems more of them ended up in Australia and they turn up down there more often. The SAS used them more than the U.S. (forces) did."

A little digging on the Internet uncovered a fascinating military paper dated April 1967 by Stanley D. Peirce of the U.S. Army Limited War Laboratory at Aberdeen Proving Ground, Maryland that chronicles the research and development of the PRC-64.

A direct link to the document is on the KI6SN Trail-Friendly Radio Extra Internet site: <http://www.TrailFriendlyRadio.blogspot.com>

"This report describes a lightweight man-pack radio for use by long-range jungle patrols," the paper's introduction says. "It covers the development program and the many tests given the AN/PRC-64 Radio which led to its acceptance for use by 'A' Detachments of the U.S. Army Special Forces."

With additional data from Maj. W.B. Fegan of the Royal Australian Signals, the report goes into remarkable detail in its study of signal loss "owing to jungle foliage," the challenges of communications for short-range (within 15 miles) and long-range patrols, and painstaking testing to come up with an assessment of "essential features." They include:

- Weight of complete station, including spare battery (and antenna system), not to exceed 15 pounds.
- Ability to provide telegraph communication up to 75 miles over jungle terrain.

- Ability to provide voice communication up to 15 miles over jungle terrain.
- Wire antenna capable of quick erection and recovery for efficient radiation in dense jungle.
- Single unit construction (self-contained).
- Whisper facility (the capability on AM communication to pick up and transmit the whisper of the operator when circumstances do not allow him to use the full volume of his voice).
- Battery condition indicator built into the set.

- Ability to operate in extremely wet and muddy environment.
- "Built-in" Morse key.

The report gives a snapshot of the incredibly difficult human and environmental conditions under which U.S. military radiomen operated during the Vietnam War.

For example: "In most areas, it is impossible to maintain communications to troops moving in the jungle. So the radio operator is expected to do his communicating during halts when most other troops are resting. This means that the

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man-pack radio set in jungle warfare is often operated by an exhausted man who has to hurry in order to complete his task before the order to march is given."

How remarkably talented and dedicated the radiomen of Vietnam proved to be.

For its part, in an era before trail-friendly radio widely existed, Delco did an excellent job of building a transceiver that was up to the job. As the report concluded:

"The results of the test program indicated that the AN/PRC-64 is well suited to withstand rugged environmental conditions. Its performance was equal to or superior to all the other man portable radios with which it was evaluated. Because of its size, weight, ease of operation and maintenance, it is suitable for use by long range patrols on counter-insurgency and normal operations."

Thanks to operator-historians such as W6JRY, the PRC-64 is as viable and reliable today as it was more than 40 years ago in the jungles of Vietnam.

### Were You a 'Spy Radio' Operator in Vietnam?

What was it like using these earliest of trail-friendly radios on the ground in a jungle environment? We'd like to hear from Vietnam veterans who operated the PRC-64 or other "spy radios" in Southeast Asia during the war. Please drop me a line at: KI6SN@aol.com



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# DX IS – Maybe

Kelly Jones, N0VD

**T**his month I thought we would step back from the “serious” side of DXing and inject a little humor. On occasion we tend to get so wrapped up in the pursuit of the chase that we take ourselves a bit too seriously. How many times have you heard the “frequency cops” shouting UP UP or worse yet, begin using profanity on top of the DX’s frequency? While DXing can certainly present challenges, especially for competitive ones among our ranks, always keep in mind that it’s just a hobby.

This month, Paul Dunphy, VE1DX, provides us with the lighter side of DXing: Last week one of the local QRPers was up the hill to get some answers to his question. He was upset, not because of countries worked or of countries missed, but because of deeper things. “When will I be considered a True Blue DXer? I’ve been licensed for almost twenty years now, and I’ve worked a lot of DX. And still, I don’t feel I get the respect of the Big Guns. Those guys who’ve been around for three or four solar cycles . . . and one is even on his fifth cycle. They don’t pay much attention to my ideas or even listen to some suggestions I have. How long will it be before I become a Big Gun DXer?”

This was not the first time we’d heard this question, and it probably wouldn’t be the last. We tried the usual answer. “You don’t measure a DXer’s prowess in years,” we said, looking him straight in the eye. “Your measure of DX stature is a measure of your understanding of the Mysteries of the Ages and being able to grasp the meaning of the Eternal Enigmas of DXing. And most of all, accepting that DX IS!”

“I’ve heard all that a dozen times!” he spouted, looking back at us and glaring with his beady little eyes. “That’s how you always answer my questions. With this philosophical stuff that no one understands. Never mind Eternal Enigmas or that sort of double talk. Why can’t you give me a concrete answers to a simple question? When will I be considered a True Blue DXer?”



We thought about this for a moment. How does one explain such things to one who is not ready to understand? We took a deep breath and gave it a shot. “To become a True Blue DXer, you have to believe. You have to believe that DXers are smarter, taller, better looking and generally a cut above the average amateur. You have to believe that the Mysteries of the Ages and the Eternal Enigmas of

DXing are what they appear, and not question them. Once you are a believer, you will become one of the Deserving, and only the Deserving are True Blue DXers. Surely you can understand this. Just be a believer!”

The QRPer didn’t understand. He stared at us for a moment and then asked with a puzzled look on his face: “Believe what? I don’t even know what any of those





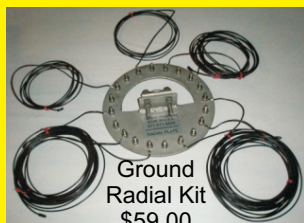
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things are. How can I believe something when I don't even know what it is? What is an Eternal Enigma? I need examples!"

It was clear that the QRPer wasn't going to accept our explanation, so we decided to give him the details he wanted. "Do you know what long path is? And do you know what short path is?" we asked. "Of course I do!" the QRPer retorted. "That's one of the first things you learn when you get a directional antenna." We looked him squarely in the eye and said, "Remember when Romeo activated Burma? Back in 1991? Did you work him long path or short path?" The QRPer looked at us with a confused face and then answered, "How should I know? That was a long time ago. Besides, what difference does it make? I have two XY0RR QSLs and the DXCC desk counted them. So what difference does it make if I worked him long path or short path?"

We looked at him with a satisfied smile. "The Big Guns you say do not give you much credibility; they worked him too. We all did. We worked him beaming 270 degrees. And we believed he was there. So did the DXCC desk. The difference is we remembered the beam heading. But we didn't question it because we were believers."

"How could he be in Burma if you worked him beaming 270?" the QRPer asked. We just smiled and replied, "Because he was. We are believers. The unusual path was one of the Eternal Enigmas of DXing."

The QRPer scratched his head and looked at us with more confusion than before. "Look," he said, "all I asked was when will I become a True Blue DXer and you are telling me I have to remember and believe a beam heading that was ten years

ago, and that it was 90 degrees off of where it should have been. What does that have to do with gaining the respect of the Big Guns?"

It was obvious we'd missed our pitch, so we tried a different angle. "If you called directional CQ DX for a rare one, something that you really needed, say a P5, and you got an answer, would you believe it was the real thing? Let's say you called for a half an hour and finally a P5AAA responded with a '5NN QSL VIA BOX 2653 PYONGYANG' when you let off the keyer. Would you believe you had nailed a real P5?"

"Of course not! No True Blue DXer calls CQ anyhow. And if I did, I sure wouldn't send off for a card to some Slim like that! What has this got to do with my question?"

We continued on. "But suppose that you did send for the card, and you really did get one back. And assume even further that you sent it in to the ARRL and they counted it. Would you then believe you had worked a P5?"

The QRPer looked at us for a moment, deep in thought. "Well, if all that happened, I guess I would believe it. If the League said it was a good one, then who would I be to question it? But that never would happen, would it?" He thought for a moment longer. "But, maybe it could happen," he said slowly, answering his own question. "What you are telling me is that as long as I believe the DX is real, then I will become a True Blue DXer and the Big Guns will respect me. That the true meaning of DX IS! is believing everything I work on the bands is legitimate?"

We decided this was a lost cause, so we simply said, "Something like that, although not quite so simplistic. Maybe you need to work on it for a little longer."

The QRPer started down the hill and then turned and said, "No, I don't think I do. I am starting to understand. All I needed was a couple of examples. I was making the assumption that DX IS! only when there is ironclad proof. The answer is quite simple when I think about it. Simply put, it can be expressed mathematically as DX MAYBE! + BELIEVING = DX IS! And once you understand DX IS! you are a True Blue DXer!" His face brightened and he picked up the pace toward the village.

We watched him go and slowly shook

our head. Some reach enlightenment sooner than others, and even Albert never figured it all out. This particular QRPer had potential, but today he was beaming into solid rock! Son of a Gun! What he didn't understand was the enlightenment would come only when he would stop worrying about whether or not other DXers appreciated his sterling qualities.

DX IS! Believe this without the MAYBE and you will become one of the Deserving. When that day comes, you'll know it. All the Deserving remember their day of DX enlightenment. And only the

Deserving will work the DX - even if it is a single P5AAA QSO from Pyongyang!

## Midway Island – K4M

A DXpedition that "IS" should just about be on the air within a few weeks after the time you read this. The long awaited DXpedition to Midway Island (KH4) is expected to be on the air October 9-19, 2009. It has been many years since a full blown operation has taken place from Midway with most of the recent activity being small activations for a short period of time.

Many of the team members for this operation are experienced DXers, several of which were on the 2007 BS7H operation. If you're missing a KH4 notch on your DXCC ladder, this will be an excellent opportunity to fill that slot. For more information, be sure to check their website at <http://www.midway2009.com/>.


## W9DXCC Convention

As summer is quickly winding down and fall is looking us straight in the eye, that can only mean the W9DXCC convention is just around the corner. This year's event will take place September 18-19 at the Holiday Inn Chicago located at 1000 Busse Road (Rt. 83) in Elk Grove, Illinois.

Presentations currently scheduled include the K5D Desecheo Island DXpedition; PS0F, Fernando de Noronha presented by Jim Model K9PPY and Bill Smith W9VA. Dennis Motschenbacher, K7BV, will discuss his recent 5J0BV San Andres activation and our very own Carl Luetzelschwab, K9LA, will be praying to the propagation gods, or at least talking about them, as he touches on Cycle 24 predictions.

Be sure to bring you cards for DXCC field checking. This is a great way to get a jump on your DXCC totals and save a few dollars to boot. For complete information about the W9DXCC convention, check out their website at <http://www.w9dxcc.com>.

*That's it for this month's column. I look forward to hearing your comments, complaints or whatever is on your mind. I'd also like to thank VE1DX this month for providing a look at the lighter side of DXing. If you have a story or opinion you would like to share, please send it to me at [n0vd@dxcentral.com](mailto:n0vd@dxcentral.com). I'll do my best to include it in my next column. Until next time, see you in pileups—and now on Twitter as N0VD!*



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Here's a peek at CQ's September issue:

- CW Results, 2008 CQ WW DX Contest
- The New Face(s) of the FCC
- Helping Ham Radio "Age Backwards"
- Rules, 2009 CQ World Wide DX Contest

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## DX Predictions SEPTEMBER 2009

Maximum usable frequency from West Coast, Central U.S. and East Coast (courtesy of Engineering Systems Inc., Box 1934, Middleburg, VA 20118). The numbers listed in each section are the average maximum usable frequencies (MUF) in MHz for contacting five major areas of the world centered on Africa-Kenya/Nairobi, Asia-Japan/Toyko, Oceania-Australia/Melbourne, Europe-Germany/Frankfurt, and South America-Brazil/Rio de Janeiro. Smoothed sunspot number = 13.

Chance of contact as determined by path loss is indicated as bold \*MUF for good, plain MUF for fair, and in (parenthesis) for poor. UTC is hours.

### WEST COAST

UTC	AFRI	ASIA	OCEA	EURO	S7
10	( 9)	9	*17	( 8)	*14
12	(15)	8	*15	(13)	(12)
14	20	11	*12	17	20
16	22	(11)	14	17	*25
18	*23	13	(12)	15	*28
20	22	*19	21	(12)	*28
22	18	*20	26	( 9)	*28
24	16	*19	*29	( 8)	*27
2	*14	*18	*29	8	*22
4	*12	14	27	*10	*18
6	(11)	12	*24	(9)	*16
8	(10)	*10	*20	(8)	*14

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UTC	AFRI	ASIA	OCEA	EURO	SA
8	(10)	(9)	*16	( 8)	*13
10	(13)	8	*16	13	*12
12	20	11	*12	*17	*20
14	22	(9)	16	*18	*24
16	23	( 8)	(14)	*18	*27
18	*24	( 8)	(12)	16	*28
20	22	15	21	14	*28
22	18	18	26	(10)	*29
24	*16	17	29	9	*24
2	*14	(14)	26	8	*20
4	*12	(11)	*23	8	*17
6	(11)	(9)	19	*8	*15

### EAST COAST

UTC	AFRI	ASIA	OCEA	EURO	SA
7	13	(8)	*16	*8	*14
9	(15)	*8	*16	12	*12
11	*24	11	*12	*17	*19
13	*27	(9)	16	*18	*23
15	*28	(9)	(14)	*18	*26
17	*27	(8)	(13)	*17	*27
19	*24	(12)	(18)	15	*28
21	*20	17	25	(11)	*28
23	*17	17	28	9	*26
1	*15	(14)	25	8	*22
3	*12	(10)	23	8	*18
5	*15	(9)	19	*9	*16



## Presenting Propagation Predictions

By Carl Luetzelschwab, K9LA

This month's column is a follow-up to the July column that talked about issues that affect propagation and the decisions required in deciding when to go on a DXpedition. Once a DXpedition has decided when to go, they'll run predictions (or have someone do that for them) and then present them in some logical format for people to use. How to present predictions to the general masses is an interesting problem, which stems from the fact that station capability can be vastly different.

For example, I worked up predictions for the five VK9 DXpeditions that occurred between mid March and mid April 2009, and subsequently posted them to my web site (mysite.verizon.net/k9la). An excerpt from these predictions (for the Lord Howe VK9LA DXpedition) is shown in Table 1.

The predictions in Table 1 were for a monthly median signal level greater than S3. They were based on 500 watts to dipoles at both ends of the path at a smoothed sunspot number of 5. All times were in UTC and truncated to the nearest hour – thus 07-12 meant an opening from 0700 to 1200 UTC. If a long path opening was predicted, the time was appended with LP.

When I sat down at the radio one evening when the Lord Howe DXpedition was on, I saw many spots from the east coast for Lord Howe via long path on 20m around 2200 UTC. Oh-oh, what happened here? There weren't any long path openings predicted in Table 1, but sure enough many east coasters were working Lord Howe via an easterly heading. In fact, VK9LA was best via long path even from my QTH in northeast Indiana. They weren't very strong, but they were workable.

The clue to this discrepancy is my comment that "they weren't very strong" in conjunction with my aforementioned S3 signal level criteria. Using 500 watts to dipoles with gains of +7 dBi in VOACAP gave monthly median signal powers between -125 and -130 dBm for long path on 20m, which is near the minimum discernible signal of our receivers. Additionally, that was well below my criteria of a signal greater than S3 (which equates

to -103 dBm assuming  $S_9 = -73$  dBm and 5 dB per S-unit). Thus, no 20m long path opening was identified in Table 1.

My criteria were essentially for a little station on the east coast end. It also assumed some site obstructions in achieving a good amount of low angle radiation (through the VOACAP option of using a 5 degree minimum take-off angle). Let's re-look at 20m long path with a big station from the east coast to VK9LA.

For power, I'll now assume 1000 watts. For antenna gain, I'll now assume a Yagi on the east coast end, with a gain of +14 dBi. And finally, I'll assume each Yagi will be at a sufficient height to offer good low angle radiation (1 degree minimum take-off angle).

The bottom right cell in Table 2 shows the overall advantage in dB that the big east coast station has over the little east coast station. That 13 dB is a sizable improvement, and now long path is predicted to produce signals near S2 on 20m from 2100 to 2300 UTC for the east coast. That should be strong enough to hear.

There are some more caveats here, of course. Even if you're a big station, an S2 signal may be masked by external man-made noise depending on your noise environment. Figure 1 gives man-made noise levels in terms of power in dBm for various noise environments.

The data suggests that you may still not be able to take advantage of this predicted long path opening if you're in a residential or rural area (the red curve and blue curve, respectively) even if you are a big station. And note that the noise data assumes a CW bandwidth – if you're listening on SSB, things will be worse as the wider SSB bandwidth lets in more noise (roughly 8 dB more assuming a 3 kHz filter).

Another caveat is that these predictions are monthly median values in line with how our propagation prediction programs were developed. On any given day, the signal strength could actually be from roughly an S-unit higher to a couple S-units

	40m	30m	20m	17m	15m	12m	10m
East Coast to Lord Howe	07-12	06-13	13-14	—	—	—	—
Midwest to Lord Howe	06-14	06-15	13-15	—	—	—	—
West Coast to Lord Howe	06-16	05-17	14-15 03-05	21-23 02-04	20-22 01-04	21-04	22-01

Table 1 – Lord Howe predictions

station	power	antenna gains	take-off angle	predicted signal	delta dB
little	500W	+7 dBi	5 degrees min	-125 to -130 dBm	reference
big	1000W	+14 dBi	1 degree min	-112 to -117 dBm	+13 dB

Table 2 – East Coast Big Station vs. Little Station



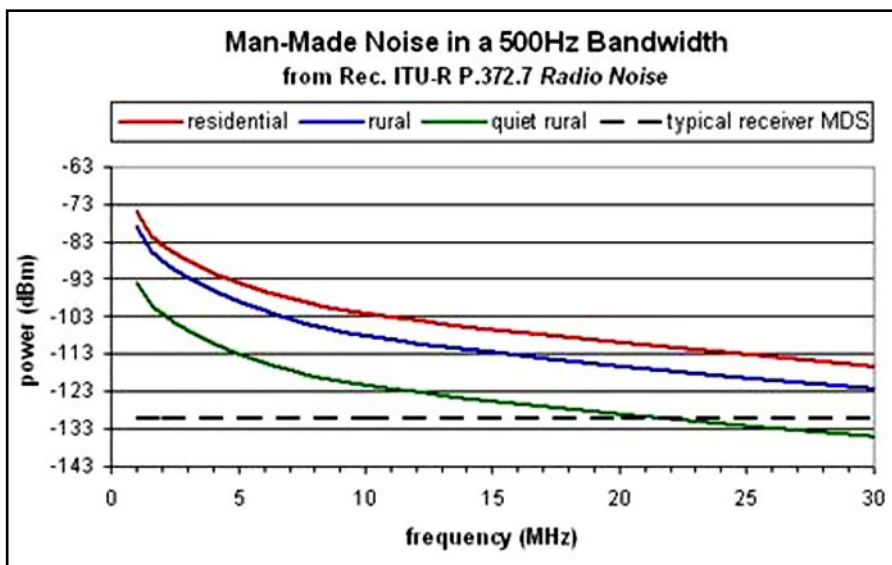


Figure 1 – Noise Levels

lower. It very well could be the day the east coast had a 20m long path opening was one of the few "good" days.

Now let's get back to the last sentence in the first paragraph of this column: How to present predictions to the general masses is an interesting problem, which stems from the fact that station capability can be vastly different. What should be apparent is the dilemma faced by those who present propagation predictions – what station capability should be assumed?

For the 2009 K5D Desecheo DXpedition I assumed little stations, as that is what the K5D team wanted (their goal was to work as many little stations as possible). Conversely for the VU4 and VU7 DXpeditions several years ago, I assumed big stations.

From my personal experience, assuming little stations for the predictions will usually result in an e-mail from a big station along the lines of "your predictions aren't very good – I worked the recent DXpedition when you said there wasn't an opening".

And again from my personal experience, assuming big stations for the predictions will likewise result in an e-mail from a little station along the lines of "your predictions aren't very good – I didn't hear the recent DXpedition when you said there was an opening".

One way around this is to present predictions based on big stations, and then give guidelines to reduce the predicted signal strength by an amount based on your specific station capability. This is essentially what N6BV did with the predictions in the ARRL Antenna Book CD.

Is either assumption (little station versus big station) better than the other? I tend to favor the big station scenario, as then no one will miss an opening. It might not be there because your station isn't big enough, but at least the predictions sent you looking just in case.

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# If It's Not One Thing, It's Another

By Jerry Wellman, W7SAR

**T**here are times when I feel overwhelmed by the length of my “to do” list. To compound what I call this “temporary depression,” at every turn there’s “something else” to be done. Then the pager goes off for one agency or another. It’s at times like these I would give anything to go back in time to when there were fewer responsibilities and demands; I could just lie on the grass and watch the clouds pass by.

I have discussed these feelings of needing to be involved and not being able to say “no” before and discovered that many readers have experienced similar thoughts! One fellow and I seem to be on the same “frequency” in that we agree to do something months in advance, like teach a class or participate in an event – only to find when the target date approaches, due to unexpected events, life is busier than expected.

Two recent events included a plane crash and a search for a missing 85-year-old. Unfortunately, the pilot did not survive the crash. It was some solace to hear that the family knew that there were many volunteers dedicated enough to respond. Additionally, the family commented that had the pilot survived, volunteers could have saved a life. Their thanks made the “demand” on our time worth it.

The other event involved an elderly rock hound who took to Utah’s mountains in the heat of summer doing what he enjoyed – being outside and exploring geology. This elderly fellow left on a Saturday. Tuesday, a Meals-on-Wheels volunteer noticed the meal left on Saturday remained outside his door. The sheriff was notified and Tuesday night, three days after he left for an afternoon of hunting rocks, a search began. On Wednesday, he was located, alive. He had rolled his truck off a somewhat rugged mountain road. He was dehydrated but recovering nicely.

Looking back, those demands on time were not so bad after all. There is some sense of satisfaction in seeing a task completed and helping get the job done – especially when lives are involved.

The missing person search will be material for the next survival class I teach to stress the two most important things to do to help ensure your survival: First, tell someone exactly where you are going. Second, tell someone exactly when you will return. Had this fellow done these two things, he’d been found Saturday evening or Sunday and would not have had to spend several more days in Utah’s mountainous and hot terrain.

Take a moment in your radio meetings to discuss survival skills. Use this perspective: Communicate where and communicate when. If you are injured and/or lost a long way from home, even the best survival kit will last only so long. You want to know with 100 percent assurance that someone is out looking for you. The lesson is also that you are aware of your “return deadline” and that you make every attempt to get home on time or call and let your family or friends know if you are delayed.

Remember, being prepared is great – be sure someone knows

you are missing and that they’ll come looking for you when you don’t return on time!

## Correct Voltage Required

Yet another call came at an inopportune time. I was focused on digging into preparations for an upcoming training class. The plea for help was that a newly purchased radio wouldn’t hold a charge and it was this person’s only “emergency” radio. My first thought was it is a defective radio and he could just return it. Unfortunately, the new owner lost the charger and the shop said to “send everything.”

The charger was left behind on a vacation trip the first time he had used the radio. A replacement from the vendor was much more expensive than what a local electronics store would charge for a “universal” replacement. Yes, he’d gone the inexpensive route. And, the radio would only operate for an hour after an overnight charge. He explained that the store clerk had looked at the radio’s 7.2-volt battery pack. The clerk sold my friend a 7.5-volt charger and assured my friend it would work – after all, the plug fit, and the polarity was correct.

Our first step was to take the owner’s manual out of the plastic cover so my friend could read it, for the first time. The vendor helped him to program it at the time of purchase, so reading the manual wasn’t on his list of things to do. What a revelation the manual provided. Under “Charging,” the manual stated that the radio display would show “now charging” and when the radio was fully charged, a lamp would indicate the process was done. Further reading indicated that the charging voltage required was from 12-15 volts at a half an amp. The “universal” charger he had bought was a few volts shy and about half the current needed.

Take a lesson folks. Read the manual! In this case, I presume there were “bells and whistles” involved that activated the display during charging and then lit an indicator when the process was complete. All of this “intelligent” circuitry would require power as well as what was needed to actually charge the battery (using, as we discovered, an internally regulated circuit).

When I teach a class on emergency preparedness my first rule of response is to have a radio manual or reference sheet with you for *every* radio you take. While I have been able to make my own simple guide for some radios, some are complex and would take me a while to prepare. I have gone to using a nifty guide – actually it’s N6FN’s “Nifty! Ham Accessories.” He has produced guides for a plethora of radios. Find his stuff at [www.niftyaccessories.com](http://www.niftyaccessories.com). Some of his guides (such as the one I bought for the Icom IC-91AD) are spiral-bound mini-manuals and others are a nice tri-fold card (wallet sized). All of these are laminated so bad weather won’t cause you stress!

I take a “radio bag” when I’m on call with a local law enforcement agency and drive one of their cars for a week. In the “radio



bag," I have the rig, a power connector, a magnetic antenna and the radio's guide. I only use this rig for a few days each month and I occasionally need to change what's stored in memory and/or change the subaudible tone. Without a guide, it takes a while to figure out the proper steps. If I needed to use the radio in an emergency, I would like to do it quickly, as time may be of the essence, so the reference guide is a must!

I was out in the field using my Kenwood TS-50S HF mobile and needed to adjust one of the radio's parameters. The mini-manual was a lifesaver, as I have it carefully tucked beneath the radio. Because the guides are well made, the pages aren't torn and dog-eared when you store them with your gear. I have laminated the pages of the guides I have made myself. Store the guides WITH the gear – taped either to the rig or in the grab-and-go bag holding the radio.

Read the manual always! Have some kind of simplified guide with you for every radio. Being able to use the features of your radio is basic operator preparedness. You cannot be clogging up the on-air time asking for help to use your own radio!

## Risk Management

In vogue lately, at least for most federal agencies, is a process called "Operational Risk Management" or ORM. In my younger days, we called this the "trial and error" and "that hurt, don't do it again" learning process. (I'm amazed to have survived to be as old as I am based on how many stupid "that hurts" errors I have survived.)

Maybe the risks are greater or people are feeling invulnerable, but whatever the cause, safety is a major concern. If you happen to participate in, for example, a wildfire daily briefing, you will hear a safety message and most likely an ORM mini-lesson. So, what is ORM?

It's defined as a process for systematic decision-making to manage risk for any operation. The goal is to reduce mishaps and improve efforts by reducing risk. If you search the web, you'll find lots of meeting-night training fodder. To get you thinking, let me review the ORM six-step process.

First, identify hazards. A hazard is any condition that has the potential to cause problems (loss of life or loss of equipment). You could spend hours and get into minute detail. Don't. Use common sense and, as a team, determine probable hazards to your operation.

Second, assess the risks. Look at each of your identified hazards and discuss the exposure possibility and severity should you encounter the hazard. Prioritize these hazards and work on the worst ones first.

Third, analyze your risk control measures. Determine which hazards can be eliminated (i.e. fixed) or controlled. You might place, for example, a warning sign on a patch of ice. In this step you figure out what you can do to minimize each hazard – and some hazards cannot be easily "fixed" so you have to decide what best to do.

Step four is to make control decisions. This may affect who is assigned to what task as some people are better prepared to face tasks with known hazards (like sending the proper vehicle into an area). You may mark hazards or take one team that is going into bad weather and ensure they have appropriate (and extra) survival gear. If a particular hazard poses a severe risk, you may even choose to avoid a task that has this high-risk hazard.

The fifth step is actually doing what you decided. You mark the hazard. You fix the bad electrical cord. You cancel a high-risk assignment. Your incident action plan may include some targeted briefings to warn people of certain hazards. Make sure you are communicating to all concerned the level of risk and the controls you have in place. You're helping people to make smart decisions as they move into action.

Last, you supervise and review. Watch your people and learn. Ensure that what you have decided is done (did the cord get fixed properly or did the team drive slowly through the hazard area?). Some of this is to also learn what worked, what could have been done better and then teach others the process.

The goal of the process is to learn not to gamble with risk. People are the most important part of our team. We don't want our people hurt or killed! There was some pushback recently in a flood rescue where teams were willing but the incident safety officer shut down operations while an area was stabilized. Yes, there was urgency in rescuing the trapped people. The safety officer carefully evaluated the risk and determined there was great risk to the would-be rescuers. Later, officials determined this would be a body recovery effort and further controls were put in place to reduce risk of those involved. It was the right decision! The first rule of rescue is to not endanger the rescuers.

Until next month, be safe! Best wishes from Salt Lake City!

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# Commute Time: Where have all the Users Gone?

**Bill Pasternak, WA6ITF**

**I**t has been many years since I worked what most would call "normal hours." Since the early 1980s I worked from 4 p.m. to midnight as part of the engineering support personnel bringing Los Angeles its 10 p.m. news on KTTV television. My work varies from repairing broadcast videotape and videocassette recorders to running camera to second audio (A2) and just about every conceivable engineering job that brings a one-hour newscast to air. My commute into work begins about 90 minutes before most people are wrapping up their day to head home.

In late May I was asked to be an "engineering ombudsman" between the local cable TV providers, satellite TV providers and the general public in regard to the June 12th transition of all full-service television broadcasters from analog to digital. My boss wanted to offer the public as much telephone-based assistance as possible. I would have my own office complete with a direct dial-in phone line and high speed Internet access. It was just one of those times when I could not say no.

One of the reasons I was requested to take this role had to do with my work history, when I regularly interfaced with the general public. I began my electronic career as a teenager fixing TV sets, radios, phonographs and the like under the guidance of the late Saul Rosenthal who owned Rose Radio and Photo in the Bensonhurst area of Brooklyn, New York. I was also a service tech for the long-defunct RuPat Television in the Bay Ridge area and for large consumer service operations as those run by General Electric and Sears Roebuck back in the 1960s and early 1970s.

There was just one teeny negative. This was a 9 to 5 job, meaning that I had to be at the station by 8:45 a.m. and would arrive back home about 7 p.m. It would be an almost two-hour drive to go the 36 miles from my home to work and vice versa. Welcome to the daily rush hours in the "City of Angels."

Since I knew I was going to be spending a lot of time in the left seat of the Malibu—most of it at between 5 to 10 mph—I figured that I would have loads of time to explore the numerous repeaters along my route and maybe get the chance to reconnect with some old friends. To prepare for the 6 weeks I would be leaving the house at 6:45 a.m., I took the time to program my trusty Alinco DR-605TQ with every repeater I suspected that I could reach on 2 meters. For over a quarter of a century I had been primarily mobile on 220 and 450, but still remembered the many fun QSOs of the past, when I last worked these hours.

I began this schedule on Monday, May 25th. As soon as I headed to work, I put out a call on the local 146.79 W6JW machine. The repeater was full scale "kerthud" but there was not a soul around to talk to. It was 7 a.m. —a solid hour into the morning drive-time and nobody was around. That seemed odd, but assumed that I would find a lot of activity after crossing the hill into the San Fernando Valley.

And so it was that as I reached the merge point of Highway 15 and Interstate 5, I put the Alinco into memory-search mode only to be greeted by dead air. A far cry from the three-deep QSOs on just about every 2-meter machine back in the era of 1972 to 1980. I began wondering if there was a fault with the 2-meter receiver or my antenna!

I spent close to two hours creeping down the I-5 into the I-405 south and then onto the I-10 west. In all that time only a handful of stations were heard. As these folks were in QSOs and I could add nothing to the topics, I did the proper thing and kept my mouth shut and my hand off the PTT switch.

About 8 hours later, I headed home, setting the DR-605 to scan, but this time full-band scanning 144 to 148 MHz. Within seconds, the radio locked up to the self-anointed "Animal Farm" repeater on 147.435 / 146.40, which was not programmed into the radio's memory. While the voices had changed in the dozen or so years since I had last tuned it in, the subject matter -- or lack thereof -- had not.

After a few seconds I hit the scan button to continue, but the only other QSO I heard while crawling north was on a closed club repeater, of which I am not a member. After about a half hour of just these two active frequencies, I opted to listen to some music off of a CD, while letting the radio continue to scan the 2-meter memories. It was not until I got to the northern end of the San Fernando Valley that the radio latched onto a QSO where I knew those involved and I joined in for the last half hour of my crawl home.

I have to say that the experience all but left me dumbfounded. I can still vividly remember when I would drive the eight miles from my home in the Panorama City/Van Nuys area to my job in Northridge and have my selection of QSO after QSO after QSO on every channel pair my radio carried crystals for. (You do remember crystals, don't you?) There was never a morning or an evening without someone to talk to on .01 / .61 or .24 / .84 or even 146.40 / 147.435 in its pre-Animal Farm incarnation. Where have they gone?

For the next four days I experimented by putting out calls on any 2-meter repeater along my route of travel. In the six weeks that I made this trek, I only made four contacts on 2-meter FM. I could key up many machines, but there were no users to bring the repeaters to life.

As I have often said in these pages, there are two aspects to a repeater: The technology and the utilization. The greatest technology in the world is useless if the public does not embrace it or the public tires of it.

Admittedly, Los Angeles is spread out and really encompasses more than just the city itself. As famed newscaster Jerry Dunphy used to begin his report: "From the desert to the sea to all of Southern California." That's the immensity of this city I

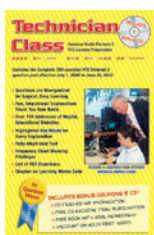


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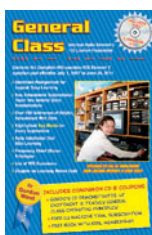
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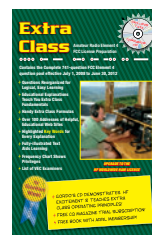
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live and work in and as such I can only judge activity among 2-meter repeaters that serve the west side. There may have been a lot of activity on systems out to the east, but those machines were out of radio earshot to my route of travel. Then again, repeaters that serve the west side also serve most of Los Angeles city proper and I was able to key them up and put out calls. It's just that nobody responded.

I had heard stories that in many places 2-meter FM has fallen on hard times, with some locations having more repeaters than users. I tended to laugh at these comments—until now. After a month and a half of calling and listening to dead silence, I have to believe that the rumors are true.

Where have all the users gone? I really have no idea. I do know that on those evenings I take my lunch break in the ham-shack at work, there are lots of nets especially on Monday and Tuesday. These nets seem to elicit a lot of check-ins but day-side it seems as if nobody listens anymore.

Today I go back to my old schedule of 3:45 to 11:45 p.m. I usually meet with some friends on the 450 side of my radio, but today I plan to entice some of them to meet me on one of the seemingly abandoned 2-meter machines in the hope of doing my small part to bring the action back. I'll let you know what happens in our next column.

## New Product: Jetstream Introduces JT-220-M for the 220 Band

Ever since the mid-1970s when I got my hands on a used Midland 13-509 transceiver, I have been a big fan of the 220 MHz ham band. More precisely the 222 to 225 MHz ham radio

allocation that used to begin at 220 MHz, but had the lower two megahertz ripped off in the 1980s for a commercial venture that was a total failure. Those of you who were around then are well aware of the story. For those new to the band, do an internet search on "UPS and 220" to find out more.

Well, it's been a long time since a new mobile transceiver for the amateur 222 to 225 MHz band has been announced. A few years ago, Alinco introduced the DR-235 which it bills as a full-featured 220 MHz 25-watt FM transceiver with an alphanumeric display, 100 memory channels, three power outputs as well as CTCSS encode and decode being standard. An optional packet radio plug-in board is available.

Due to a lack of cash-flow, I've yet to get my hands on a DR-235 but those who own it have had nothing but rave reports about it. If you go to <http://www.eham.net/reviews/detail/1404> you can read the user reports for yourself. In essence it's described as a plain-Jane radio that does everything advertised and does it well. And with no other manufacturer offering any stand-alone 222 MHz mobile gear since Icom and Kenwood discontinued theirs, Alinco's DR-235 has had the market to itself. Now Jetstream, the company best known for its power supplies and ham station peripherals has introduced its new JT-220-M transceiver that seems destined to give the DR-235 a run for its money.

Like the Alinco DR-235, the Jetstream JT-220-M is an FM only transceiver but it runs 50 Watts out in its high power mode from any of its 99 memory channels or its one programmable call channel. It features a large black on blue LCD display, a backlit DTMF microphone, a time-out timer plus built in CTCSS and DTS encode and decode. Both memory scan and

band scan are available. There's even an internal tone burst encoder for those rare spots in the world that still use it.

The JT-220-M's newly designed double conversion receiver uses intermediate frequencies of 21.7MHz and 450 kHz to maximize image rejection of unwanted signals. The overall receiver design yields a squelch sensitivity of point one microvolt. In other words, this radio can hear as well as talk. The JT-220-M is computer programmable using an optional cable.

If you have been thinking about getting

a radio for 220 but have been looking for something new, the JT-220-M may be the transceiver for you. Judge for yourself on-line at [www.jetstreamusa.com/jt220m.shtml](http://www.jetstreamusa.com/jt220m.shtml). For those of you looking for a 222 MHz FM transceiver with a proven track record, the specifications on the Alinco DR-235 can be found at <http://www.alinco.com/Products/DR-235/>.

Either way, if you pass through the Santa Clarita, California area give me a shout on 223.5 simplex or on one of our local repeaters. I'll likely respond using a 1980s era Icom IC-37A. And in one of

the closets I still have a fully crystallized 10 Watt Midland 13-509.

## Not Ham Radio, but Please Permit Me to Share

After returning home from my high school's Class of 1959 50th reunion (<http://www.lafayettereunion59.myeven.com/>), I decided to write a short piece about the gathering.

For those few who never heard of the "Emerald City" it's the place in fantasy where Dorothy must go to find the wonderful "Wizard of Oz" in hopes of getting back home to Kansas. It turns out to be a mystically beautiful place where magic can happen with a little assist from the humans and the Munchkins who reside there.

Well, our Emerald City was the Rotunda at Kingsborough Community College in New York. We "built" it the afternoon of April 25th and partied there until the witching hour. After we departed, our city was gone in the reality of the next sunlight, but it remains alive in our hearts and minds.

Now, like Dorothy, we have each returned to our own Kansas, but we take with us the memories of that truly magical evening when we were able to turn back the sands of time. And, if only for that fleeting moment we could collectively revel in "what was" and share the "time since" with those who we had not seen in half of a lifetime.

As a writer, I am always looking for the right words to close out a chapter of life so that I can go on to the next. In this case, the words are not mine but those of writer and lyricist Steven Schwartz from his "Oz-based" musical *Wicked*. A stanza from his song *For Good* seems so apropos at this moment:

It well may be  
That we will never meet again  
In this lifetime  
So let me say before we part  
So much of me  
Is made of what I learned from you  
You'll be with me  
Like a handprint on my heart  
And now whatever way our stories end  
I know you have re-written mine  
By being my friend.

Now, we each go off seeking our next adventure. None of us knows where the winds of fate will carry us. In reality, that's not very important because we had that one very special night in our Emerald City and it will last all of us for a lifetime.

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# Dayton Youth Forum '09 Rocks

Carole Perry, WB2MGP

“**T**his forum rocked” were the words of a seven-year old as we left the Youth Forum room at the 2009 Dayton Hamvention®. He and his mom asked if he could interview to be a speaker at next year’s Youth Forum. A garland of roses placed around my neck could not have pleased me more. The whole purpose of this forum is to inspire youngsters in the audience to become hams, or to become more active if they are already licensed.

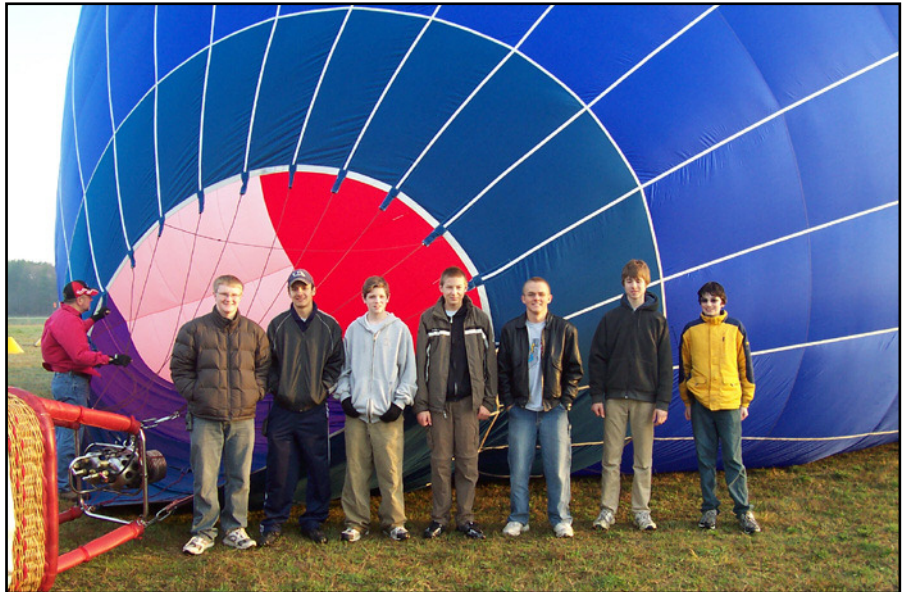
This year, not only did we have nine exceptional speakers to entertain and impress the audience, the co-sponsors and I prepared lots of surprises for everyone in attendance.

First up at the podium were the four Makky family children. Dad, who is Steve Makky, KA2AYR, was a speaker the day before at my Teacher’s Forum. He spoke about recruitment methods he used to get an all ham family, including wife, Susan, KC0BLF.

Nine-year old Carol Makky, KD0FEE, and her sister, Caitlyn Reynolds, KC0ZFV, age 16, called their presentation “Pretty Smart.” Young Carol got a round of applause when she said, “That’s because we’re pretty and smart.” She then presented the educational advantages of studying for and taking the Technician Exam. They both sharpened their math and science skills by learning about radio waves, antennas, metric conversions, and antenna construction. Their study skills and time management skills were also enhanced.

Other learning experiences they spoke about were volunteerism, Skywarn, ARES, and studying more to advance and upgrade to General and Extra. They were a delightful duo and charmed the audience.

The girls’ brothers presented next on “DXing and QSL Card Collecting.” Steven Makky Jr., KD0BHG, age 12, discussed his Clipperton Island contact. His dad was attempting to make that rare Clipperton contact on the Extra frequencies. He called Steven into the radio shack when the General frequencies opened up.



The ARGYL group tested their radio signals from a hot air balloon

Steven made the contact on the first try. Dad resumed his own efforts. It took him four days to make his contact.

Robert Makky, KD0DLU, age 11, discussed DXing as a Technician. While not

having as many options as the General and Extra Classes, the Technician can have lots of fun using VHF, UHF, weak signals, meteor scatter, ducting, hilltopping, amateur satellites, the International



The ARGYL group with the airplane that took them to 2400 feet to test their radio signals.



**Austin Schaller giving his talk on "Fractal Antennas."**

Space Station, moonbounce, HF DXing and CW. The Makky family was a great opening act.

Austin Schaller, KD0FAA, age 14, wowed the audience with his presentation on "Fractal Antennas." He spoke with the composure and confidence of the youngsters who come each year to the Youth Forum from the Boulder Amateur Radio Club Juniors. Austin impressed every single person in that room and fielded the audience's questions like a pro. He explained that a fractal is a geometric formation that exhibits self-similarity. If you were to zoom inward on any fractal, it would look the same without any magnification at all. A fractal begins with an initiator, which could be any basic shape. When you add more iteration or go through more cycles, you generate smaller copies of your initiator. Fractal antennas take fractal geometry and electromagnetic theory into effect to yield a unique antenna.

It was obvious to everyone that this young man is a credit to his teachers, Elmers, and Elmiras. We know we will be hearing more from Austin.

Simon Boehme, KC8ZYD, age 17 is the Michigan ARRL Youth ASM. He gave a very inspirational presentation called, "Capturing the Youth through RAC." RAC stands for "recruit, advertise, and cool factor."

Simon explained that he worked with his section manager to organize a youth conference that would give the young people a voice in ham radio. He talked about recruiting through local clubs, and what to do once the young people got to a club meeting. Simon gave some excellent suggestions about changing the format of the usual club meeting and postponing the business meeting part of the agenda to another time.

He stressed how important it was to make the young people's first ham radio club encounter welcoming, friendly, and exciting. He advised discussing plans and future activities that would interest youngsters, like Field Day, foxhunting, etc. Simon also suggested that serving cookies and soda wouldn't be a bad idea either.

Advertising youth activities in your local media will get the word out. Coverage of events showing kids having fun with radio will be enticing to others. Advertising in the schools is another way to invite the youth.

The audience was especially interested in the "cool factor." Simon explained how the instructor or teacher must be some-

one who knows how to work with kids and how to motivate them. You've been reading in my columns for years how important I believe this single factor can be in accomplishing your goals of getting kids involved with ham radio. A good instructor will stress the opportunities for kids in scholarships, leadership roles, having fun, and talking to friends for free. Most importantly, the kids should be able to sense that their instructor/teacher is really passionate and enthusiastic about amateur radio themselves.

Al Eckman, WW8WW, is the advisor to the ARGYL club (Amateur Radio Group of Youth in Lowell). I always look forward to the presentation that Al's club members give at the Dayton Youth Forum. This year he brought three young men whose topic was, "Let's Go Mobiling." They spoke of several unique ways that members of ARGYL have used their handhelds as mobile units.

Ian Blodger, KD8AII, age 18, Ben Veltman, KD8GBY, age 16, and Josh Gerard, KC8ZOW, age 15, had a fabulous power point presentation showing their adventures on land, air and sea. They tried to accomplish these goals while airplane, train, and hot air "mobiling":

1. They wanted to have a fun amateur radio activity for the members of their youth club.

2. They wanted to compare the differences in making contacts through repeaters from the air (airplane/hot air balloon) with no obstructions, against contacts made through repeaters on the ground **with** obstructions. They found that they could hit the repeaters from 1000 feet (hot air balloon) or 2400 feet (airplane) much more easily than on the ground directly below the hot air balloon and/or airplane. Signal reports from those contacted from the air were much better than signal reports from those on the ground.

3. It was difficult to make contacts from the train's passenger car due to the mass of steel surrounding the passenger car.

4. They were also interested in whether there would be a "Doppler effect" when a student transmitted into a repeater when the plane was traveling at about 180 miles per hour towards, or away from, the repeater.

It's an understatement to say the audience really enjoyed the visuals and sound effects chronicling this awesome adventure.

These were all tough acts to follow. Nevertheless, my co-sponsors of the forum outdid themselves. The theme this year was to honor and encourage the speakers. ICOM has been a stalwart supporter of the Youth Forum for 18 years. Not only did it donate a radio for every speaker this year, it donated two more for door prizes for kids in the audience. Diane Morrison from ICOM, who was sent by Ray Novak to help us at the forum, helped give out nine IC P7A handhelds and an ICT90A and an IC 91A. These multi-band HTs were an enormous hit. ICOM also had a table filled with ham radio t-shirts, comic books, and ham radio calendars for everyone. Thanks to Diane and to Izzy Gates for always helping with the distribution of the ICOM goodies.

Richard Stubbs, KC5NSZ, representing Mr. Jue and MFJ, bowled over the speakers by presenting them with mobile antennas. The nice folks at MFJ have contributed to the Dayton Youth Forum almost since its beginning 22 years ago. I know I can always count on Richard and Mr. Jue to be supportive of young people and education.

Rich Moseson, W2VU, Editor of *CQ Magazine*, attended the forum and provided a complimentary copy of CQ to each young



ham, which included the quarterly “by, for and about” young hams column.

Ralph Irish, W8ROI, and his club, the L’Anse Creuse ARC were major contributors to this year’s Youth Forum as well. For 17 years, Ralph has helped at the forum, printed the door prize tickets, and consistently provided us with door prizes. As co-sponsors of the special forum this year honoring the speakers, the L’Anse Creuse ARC also provided a wonderful gift packet for each speaker. They received a certificate of recognition, collectable postal space covers, and a stipend check. The kids in the audience were then all excited when Ralph and club President Jim Stafford, K8LFE, announced they were donating four MFJ, HF SSB travel radios and microphones. One of the young speakers whose arms were laden with gifts was heard, to say, “It feels like my birthday.” That made us all feel so good.

I assured the kids it wasn’t time to sit down yet. I called up Stan Reubenstein, WA6RNU, who is the President of the Radio Club of America. It was great to see other members of my club sitting in the audience and running around helping the speakers with their equipment when

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needed. Steve Meer, K0SCC, Ron Jakubowski, K2RJ, and Bruce Marcus, WA1NXG, were good representatives of RCA. I gave out a special “RCA Young Achiever’s Award Certificate” to each speaker, while Stan presented each one of them with a stipend check to show our support and encouragement from the Education Committee of RCA.

Please go to the RCA website to find out more about our educational efforts and learn how you can help.

It was a heart-warming experience to see the young people who travel to Dayton at their own expense be recognized and rewarded by the generous co-sponsors and by the “love audience” who come out to support them year after year. I hope that we will have even more co-sponsors next year. Thanks also to DARA (Dayton Amateur Radio Association) whose devotion to youth in amateur radio makes the whole thing possible.

**The nine speakers from the Dayton Youth Forum and the youngsters from the audience who won two ICOM radios and four MFJ radios.**

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WorldRadio Online, September 2009 **35**



# The YLs are out in Full Force

Cheryl Muhr, NØWBV

**T**here have been many events happening in 2009 and the YLs have been out in full force. Here are just some of the YL- attended events so far!

## Dayton Hamvention®

The Hamvention® was a blast this year! The YLRL/Buckeye Belle booth had a crowd, even when it wasn't raining. There were YLs who traveled to Dayton from all over the world and many YLs were in the arena working at various booths.

The YL forum was moved to Sunday (it is usually held Friday afternoon) and a number of the YLs weren't able to attend. As a result, "informal" YL meet-and-greets were held in the cafeteria area. This was a great chance to see everyone.

Ann Nutter, VE3HAI, attended Dayton and writes that "Barc, VE3HAH, and I enjoyed stopping in at the YLRL booth. As a special treat, my daughter, Janet, N9ZKU, was able to take the day off work and go with us. One of the highlights at Dayton was a chat with Kay Eyman, WAØWOF. Kay and I shared a ride from the airport to the Philadelphia YLRL convention back in the seventies and have kept in touch ever since. Another special treat was to meet all the Chapter 120 gang at the QCWA booth. It is rare for everyone to be there at the same time. Even the weather was good this year. What more can one ask for, except to wish everyone a healthy and fun summer?"

## HamCon Colorado & SeaPac®

The end of May brought the HamCon Colorado convention for the ARRL Rocky Mountain Region. The YLs were out in abundance. I (**Error! Bookmark not defined.**, NØWBV) was the keynote speaker for the luncheon. The topic was *Never Stop Learning: From the Newbie to the Vet*. It encompassed a bit of everything from Emergency Services to DXing, DXpeditions, Schools and Ham Radio, and everything else in between. The YL forum on Sunday was well attended and we actually got an OM to attend as well - without his YL!



Cheryl Muhr, NØWBV; Ann Nutter VE3HAI; and Jacqueline Gosselin, N3ZEL

Sara Lyons, AB7PS, wrote, "The first weekend in June was SeaPac®, the Northwestern Division ARRL Convention in Seaside, OR. As usual, we had a YLRL table. It was fun to meet the YLs who came by, many of them new to amateur radio. Nineteen YLs and one OM (who kindly took our picture) attended the YLRL luncheon at noon.

"Roxanne Holwege, AB7HO, and Alice Wood, KE7BRO, gave an excellent PowerPoint presentation, *YLs Make Waves*, about the participation of YLs in local emergency preparedness. Alice and Roxanne told the audience about being cut off from normal communication outlets two years ago during a powerful storm. Without amateur radio, they would have been completely isolated. This spiked interest in STARS, Seaside Tsunami Amateur Radio Society, a recently formed radio club with the call sign WA7VE. I was very impressed with the large number of YLs from Seaside and the nearby area who attended SeaPac® this year. Two other YLs from other

counties in Oregon reported that they now have YL nets as well."

## Field Day

Field Day is always an excellent way to get YLs on the radio. Marta Tullis, KC0FXI, operated heavily at W0NT in Colorado. In addition, there was a new ham, Marie Teto, KD0BQD, who was willing to get on and try it if she had help logging. These two ladies show the true Field Day spirit! Both the experienced operator and the inexperienced operator had fun and used their great YL voices to either break through the pile-ups or start their own run.

I hope to get more Field Day information for the next YL columns, so PLEASE, let me know how your Field Day went.

## Special Events

Emily Bishop, WE4MB, reports some fun from the Indianapolis 500. "My last day of school was Wednesday, May 20th.





Cheryl Muhr, NØWBV, logging for Marie Teto, KDØBQD.

On May 21st dad and I left in a packed motor home for Indianapolis so I could help operate the Special Event station W9IMS (Whiskey 9 Indianapolis Motor Speedway). On the night before the Indy 500 race, all the YLs of W9IMS took over the radios and operated for 3 or 4 hours. We had pileups on 80 meters, 40 meters and 20 meters. We had a good time. That's what it's all about - having fun with your friends. We ate well while we were there, too. This was the first time I attended the big race. The Indy 500 was awesome; I'll never forget the feeling I had when those engines started. I can't wait until next year. "

### Young Ladies Getting Their Licenses

Emily, WE4MB, also wrote in about the Latham sisters - Veronica, KB3SSN, and Victoria, KB3SSM - ages seven and eight of Shippensburg, PA. They became hams a few weeks ago and are the talk of their town. Both of their parents are hams. Their father, Shannon, is W3SML and their mother, Rachel, is KB3RNP. Veronica and Victoria have been around ham radios most of their lives. "This is a family that loves the hobby and I'm sure will grow even closer because of it," writes Emily.

Along with these young YLs, Anna Cole, KS3P, is a 4th generation amateur radio operator. She was licensed at eight and became an extra at age nine!

Anna Veal, KD0HUY, is also just eight years old and she passed her test at Dayton. She had her call and was already operating the W1AW/0 station at HamCon Colorado.

It is great to see not just the young people, but also the young YLs going out and getting their licenses. But they don't just get the licenses...they USE the them! I have met some of these young hams on the air and hope to meet more soon.

### Contesting

Mary Moore WX4MM, reports a nice YL contingent (WX4MM, KI4ERR, KI4YZY, KJ4UNA) worked the Alabama QSO party. They made 614 contacts in 12 hours, which Mary states wasn't bad considering she was the only one who had contesting experience.

Plus, she worked the June VHF QSO Party on 6 meters over the weekend. "I had a lot of fun in a short time. Managed 149 contacts in 70 grid squares. Between housecleaning, grandkids, ironing, hemming work pants, going out to eat, a little dancing, and a trip to the country to help a friend get digital TV connected I only managed to operate for four hours. Maybe next year I'll find someone to do the chores and I can play more. Had a real good time on 6 meters and recommend all the gals get on the air. Only heard one other YL on the band."



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The YLs are out there, but in short supply, so get on the air!

### A Milestone

Dot Bishop, VK2DB, reports a great YL milestone for Mavis Stafford, VK3KS. "It isn't often that someone can celebrate 70 years of holding an amateur radio license and here is one ALARA (Australian Ladies Amateur Radio Association) member able to do so. I know many of you will not have had contact with Mavis at all, but she was a very radio-active woman before she moved into a retirement village. She still often uses CW to get and give points in the ALARA contest."

There was a luncheon to celebrate in June, but Dot added, "However, if, like me, you can't attend, you could think about sending her a congratulatory note or card."

Mavis Stafford VK3KS  
UNIT 71 Cumberland Whalley Drive  
Wheelers Hill, Victoria 3150  
AUSTRALIA

### Silent Keys

Unfortunately, there are times when sad news also needs to be reported.

Alaska recently lost Geraldine Baker, KL7ALZ. Geri, as she was known, was a great operator and a very active YL. She moved to Alaska in 1942 with her OM Nick and they began a fun life that involved ham radio and a great love of animals.

Geri was a founding member of PARKA, the YL radio club founded in 1955 by some of the best YL operators in Alaska. She remained very active on the air for many years and never let her YLRL membership cease. Geri was 83 years old at her passing. Many of you no doubt have her in your logbooks and if you are fortunate to have obtained a PARKA Lucky Seven award or talked to a YL in Alaska, odds are it was Geri Baker, KL7ALZ.

Also reported as a Silent Key is Thelma Woodhouse, VE3CLT, who passed away peacefully on May 6, 2009 in her 95th year.

Our condolences go out to both of their extended family and friends.

Don't forget to send me news. I need to know what the YLs are doing out there so it can be reported. Hope you're having a great summer and you can get on the air. See you on the bands!





## SteppIR SDA-100 Controller

SteppIR's slogan for Dayton was "step up to the next generation of antennas." SteppIR's new SDA-100 Controller (Photo A), designed around the AMTEL 1890 microprocessor, has many more features made possible by the larger memory capacity of the chip. Features include larger LCD display, dedicated LEDs for direction indicator and antenna tuning, software updates via USB, and passive lightning protection. For more details, visit <[www.steppir.com](http://www.steppir.com)>.

## MFJ-2820 License Plate Antenna Mount

The MFJ-2820 License Plate Antenna Mount (Photo B) fits between your car's license holder and license plate and provides you with a sturdy, convenient, no-hassle antenna mount for most HF/VHF/UHF antennas. Price is \$49.95. Visit <[www.mfjenterprises.com](http://www.mfjenterprises.com)>

## Ten-Tec Model 610 USB Keyer Interface

Ten-Tec displayed a pre-production version of its Model 610 USB Keyer Interface at Dayton (Photo C). With the 610, remote users of the Omni-VII (via the One PlugRemote software) can easily interface keyer paddles, microphones, and headphones. Controls include code speed and audio volume. Expected availability is early summer with a price under \$200. To order or for more information visit <<http://radio.tentec.com>>.



Photo A—SteppIR's new SDA-100 Controller has a larger LCD display than previous models, as well as dedicated LEDs for direction and antenna tuning, among other features.

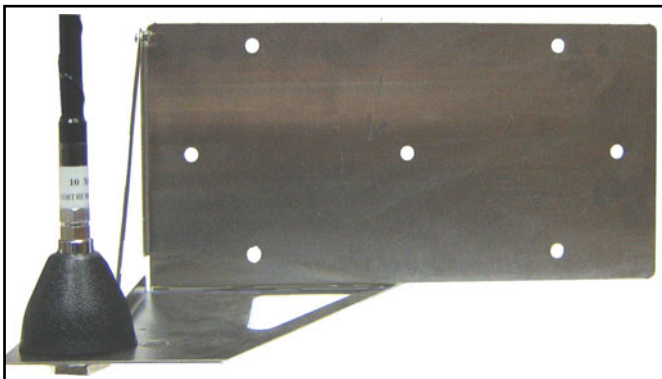


Photo B—The MFJ-2820 fits between your car's license plate and bracket and provides a convenient antenna mount.

## Kanga US PIC-EL III by AAØZZ

The PIC-EL III by AAØZZ (Photo D), from Kanga US, is the newest version of PIC Programmer for 18-pin PICs via your PC's USB port. Available as a kit, the unit runs with Microchip's free PICKit2 application software (supplied with kit). Price is \$65. For details visit <[www.kangaus.com/picel\\_iii.htm](http://www.kangaus.com/picel_iii.htm)>.

## Idiom Press Rotor Illuminator

Idiom Press's Rotor Illuminator (Photo E) is a three-LED replacement circuit for the incandescent lamp in Hy-Gain control boxes. "Buy this kit and never have to worry about finding scarce 28-VAC bulbs, and never have to change the bulb ever again!" says the company. Price is \$10.95 postpaid. Visit <<http://idiompress.com>> for more information or to order.



Photo C—Ten-Tec's Model 610- remote USB keyer interface gives greater flexibility to remote users of the Omni-VII transceiver.

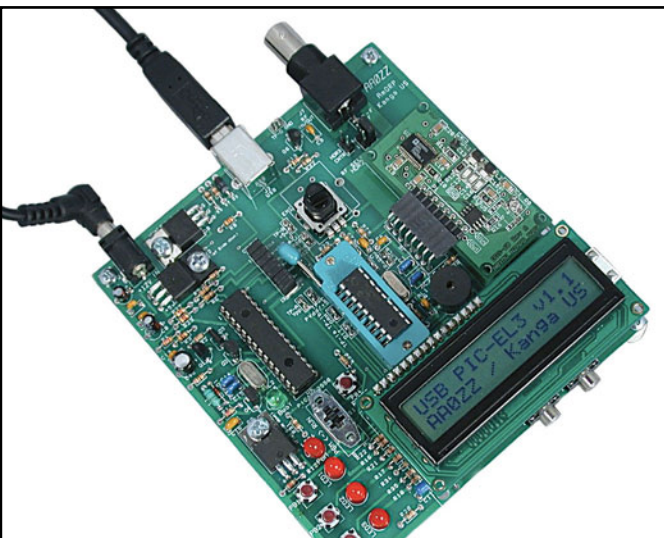


Photo D—From Kanga US, the PIC-EL III by AAØZZ.

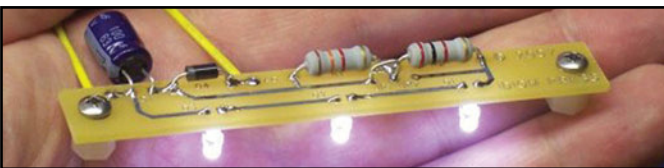


Photo E—Idiom Press's Rotor Illuminator is a three-LED replacement circuit for 24V incandescent bulbs in certain Hy-Gain rotors.



# The QCWA and Behavioral Science

Alan Pickering, KJ9N

**S**ociologists and other behavioral scientists who study the way folks behave when they are assembled into groups discovered that when people gather, they tend to behave in ways that differ significantly from the way those same people behave when they are alone. QCWA chapters are not immune from these insights into the way we function when we are in our meetings or otherwise engaged in group activities. Much of the principal research into these phenomena can be traced to Dr. William Schutz, who lived and taught in California over a quarter of a century ago.

What Dr. Schutz discovered about group behavior, as applied to meetings of people with similar interests (such as QCWA chapter meetings), was that no matter what the subject of the meeting might be, or the activities that engaged the attention of the group, three subconscious questions were constantly being mentally raised.

1. The first subconscious thoughts that every member has is: Who is in charge here? Who is controlling what is going on? Is there any order, sequence or direction being given to the group?

This question of direction and control is fundamental to gaining the participation of those present. Nothing is more disconcerting to someone who comes to a meeting and immediately discovers mayhem, disorganization, small cliques already gathered or just general chaos with no immediately identifiable leadership. Even if the announced time for the start of the QCWA chapter meeting is as much as 30 minutes away, having no plan to welcome and integrate someone who arrives early can be fatal to their later participation. So even without anyone asking out loud what is going on, or who is in charge, subconsciously the question is being processed in the minds of all who are present. In fact, not only is this question of control being asked immediately in the mind of anyone who attends the meeting, that same question is subconsciously asked over and over again as the meeting continues. And only if there is an apparent positively identifiable response will those in attendance continue to be mentally a part of what is going on, because no one wants to be in a meeting with a bunch of mental “drop outs” around them.

Sometimes all that is required to meet this universal mental need for control is to have someone in charge of name tags who will greet and provide direction to all who enter the meeting space in which the group gathers. Just having someone whose task is to pay attention to and greet all who come through the door and see that they are introduced – if necessary – to another meeting participant or group thereof will do the trick of answering in a positive way this first subconscious question of “who is in charge?”

2. The second subconscious question each participant asks is that of inclusion. In other words, “Do I belong



here?” What have I in common with this group of people? Do I really have some past amateur radio or electronics experiences that match the past experiences of any others who are also present, and are my ideas truly welcome?

Now we all know that “birds of a feather flock together,” and that means that we have to feel we are an integral part of any flock if we are to stay involved and interested in this group of which we have just become a part. So, the feeling of inclusion must be nurtured and supported. Having at least a 25-year history since first being licensed as an amateur radio operator is something that all QCWA members share in common, and should be a common bond between all chapter members. The details of how we came to amateur radio, how we were nurtured in the beginning of our interest in this great hobby/service will provide good grist for the conversational mill. But feeling included because of shared experiences of some sort is vital to staying active in any group of which we are a part. Every time someone with whom we are speaking, or when someone who is making a presentation, refers to past events, perceptions, feelings or common experiences, then our own feeling of inclusion is enhanced and strengthened. Every QCWA chapter officer should be committed to making sure that no one who is present feels in any way left out of the conversations, exchanges of information, and general dialogue going on. A behavioral scientist friend of mine explains it this way: Everyone present in any meeting is silently and covertly broadcasting the call letters of their personal radio station, with the call letters of WIFM – “what’s in it for me?” We all want an answer to that question, and if we do not receive an answer that satisfies us then our participation comes to an immediate end and we mentally and emotionally drop out.

3. The third and final subconscious question that every person in a meeting is constantly and continuously asking is this: “Does anyone here care about me?” This question is the question that tests our “affection” for one another, our emotional investment in others, and the degree to



which others care about us. Although we may quickly discover that someone is in charge of the meetings we attend, and answers the question of "who is in charge and knows what the meeting agenda is," and furthermore, that we have the necessary historical qualifications to "belong" among them, we still need to know that we are appreciated, wanted, and cared for in all of our infirmities and handicaps.

Let's face it: we all want to be loved, and when, in fact, we feel loved by any QCWA group of which we are a part, then our enthusiasm for that group rises to a very high level. Loyalty and appreciation to both the group and the individuals who show that they indeed do love us, quickly follows. Now it is a matter of fact that appreciation can be structured by having one or more members appointed to a "health and welfare committee," for the express purpose of making sure that meeting absentees are followed up and that absences are noted as important losses to the group's future. Having someone ready to inquire by phone or e-mail as to the cause of an absence at a chapter meeting, can quite quickly communicate that someone (preferably the whole QCWA chapter) cares about those who are missing. Having the enquiry come not as a structured item of business, but as a free and spontaneous action by one or more of our chapter members or colleagues is a very powerful incentive to be present at and to attend every QCWA chapter meeting.

What Dr. William Schutz discovered about the behavior of folks who meet in groups is really not all that unique or new. Most of us recognize the behavioral science aspects of QCWA meetings as being simple common sense. But it never hurts to renew and review what common sense tells us. It is vital that we practice these three aspects of our QCWA meetings as we seek new members to join us. To retain those who have already made that initial step of membership, we need to pay attention to their subconscious questions and emotional needs. Control, Inclusion, and Affection. Those are the three behavioral science legs of QCWA meetings that every attendee enjoys and appreciates. I hope your QCWA chapter practices them as a regular part of every QCWA meeting. Indeed, we are the Elite, the Proud, and the Many. We are the QCWA! So until next time, I remain Alan, KJ9N.

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# Visit Your Local RADIO CLUB

## ARIZONA

**Green Valley Amateur Radio Club.** Meets 7:00 p.m., 2nd Wed. of the mo. @ SAV Building. Nets weekly on 2M, & 20M in the summer. Come join us for breakfast every Wed. 7:00 a.m. Contact Gene W0KAD, 214 N. Crocodile Rock Dr., Green Valley, AZ 85614 or 520/207-4706 or [theschou@cox.net](mailto:theschou@cox.net). 12/09

## CALIFORNIA

**Amador County ARC,** P.O. Box 1094, Pine Grove, CA 95665. Regular meetings first Thursday of the month. All meeting dates and locations, with directions are posted at [www.k6arc.org](http://www.k6arc.org). as is other club info and contacts. Reprtr: 146.835, PL 100 10/09

**Catalina Amateur Rptr. Assn.,** P.O. Box 425, Garden Grove, CA 92842. Meets 2nd Sat. (even months) 8:00 a.m. Hometown Buffet, corner of 17th & Lincoln Ave., Santa Ana, CA. Rptrs: AA6DP 147.09(+), 224.42(-) PL 110.9 on Catalina Island; [www.cara.nu](http://www.cara.nu) 12/09

**Contra Costa Communications Club, Inc.,** W06E2C/R. P.O. Box 20661, El Sobrante, CA 94820-0661. Meets 2nd Sun./monthly (except May & Dec.), 8:00 a.m., Denny's, El Cerrito, CA. 145.110, 224.300, 444.275w/ PL 82.5 Info: Victoria Thompson, KE6FSW, 510/724-4966. 9/09

**Downey ARC, Inc.,** W6TOI. Meets 1st Thurs./monthly, 7:30 p.m. at the First Baptist Church, 8348 E. 3rd St., Downey, CA 90240. Info: [k6tv@arrl.net](mailto:k6tv@arrl.net). Nets: Tues. 7 p.m., 445.640(-) pl 156.7 & Thurs., 7:30 p.m., 145.595 simplex, [www.downeyarc.org](http://www.downeyarc.org) 9/09

**El Dorado County Amateur Radio Club,** Meets 4th Thursday/monthly, 7:15 p.m., Federated Church, Thompson Way, Placerville, CA. Net 8p.m. Tuesday 147.825-PL82.5Hz, POB 451, Placerville, CA 95667, [www.edcsrc.net](http://www.edcsrc.net). 3/10

**Golden Empire Amateur Radio Society, W6RHC,** meets 3rd Fri/monthly, 7:00 p.m. (rag-chew 6:30 p.m.), Search & Rescue Building, 2591 Morrow Lane (East end), Chico, CA. Visitors welcome. Net Tue, 2000 hrs, 146.850 pl 110.9; [K6RSC@randallstone.net](mailto:K6RSC@randallstone.net) 10/09

**Independent Radio Club, WA6IRC** meets 7p.m., last Friday of the month, Lamplighter Restaurant, 5043 Van Nuys Blvd., Van Nuys, CA. We are a family-oriented radio club whose members are interested in all aspects of Amateur Radio. Check out our weekly nets Tues. 6 p.m. & Thur. 8 p.m. on 445.340 (-)PL 103.5 & 224.480 (-)PL 110.9. More info, [www.ircradio.org](http://www.ircradio.org) or 3624 Foothill Blvd., #1, La Crescenta, CA 91214. 12/09

**Nevada County ARC** meets 2nd Mon./monthly, 7 p.m., Salvation Army Bldg., 10725 Alta St., Grass Valley, CA. Net Tues. 7 p.m. 147.285, [www.ncarc.org](http://www.ncarc.org). For info. e-mail [president@ncarc.org](mailto:president@ncarc.org) 12/09

**Oakland Radio Communication Association (ORCA)** meets first Sat/monthly (no meeting July--weekend after Labor Day Sept.); Oakland Fire Station #1 OES Media Room (17th & MLK); weekly net Thurs. 7:30 p.m. 146.880 + 77. Talk-in on same frequency. P.O. Box 21305, Oakland, CA 94620-1305, [w6bner@arrl.net](mailto:w6bner@arrl.net); [www.w6for.com](http://www.w6for.com) 9/09

**River City A.R.C.S.** Meets 1st Tues./monthly, 7:30 p.m., N. County Corp. Yard Facility, 5020 Don Julio at Elkhorn, Sacramento, CA. Message Phone: 916/492-6115; [www.n6na.org](http://www.n6na.org) 12/09

**Sonoma CRA, Inc. W6LFJ,** P.O. Box 116, Santa Rosa, CA 95402; 707/579-9608. Meets 1st Wed./monthly, 7:00 p.m., 2050 Yulupa Ave., Santa Rosa. Net each Tues. 7p.m., W6SON. Rptr. 147.315 MHz (+) PL 88.5 [www.sonomacountyradioamateurs.com](http://www.sonomacountyradioamateurs.com) 9/09

**South Bay Amateur Radio Club.** P.O. Box 536, Torrance, CA 90508. Meets 3rd Thurs./monthly, 7:30p.m., Torrance Memorial Hosp., 3330 Lomita Blvd., Torrance, CA. Talk-in on W6SBA rpt. 224.38(-). Info: 310/328-0817; [www.w6sba.org](http://www.w6sba.org) 12/09

**Southern Sierra ARS** meets 2nd Thurs./monthly, 7p.m., except Jul., 600 Dennison Rd., Tehachapi, CA 93561 (The club house at Mountain Aire Estates). Info: N6MLD, 661/203-7005, 224.42(-) PL 156.7. APRS 144.390(S). ARES nets 7 p.m. 147.51(S) Mon. 1/10

**Tri-County ARA (TCARA).** Meets 7:30 p.m. 2nd Wed monthly, Administration Building, Brackett Field, La Verne, CA, in the Pilot's Lounge. Different guest speaker every month. Anyone may attend, Ham & non-Ham welcome! Club net Sun., 7:00 p.m., Mt Baldy Rpt. 145.440 MHz--600 PL 136.5; web site: [www.tcara.org](http://www.tcara.org), e-mail: [k6agf@arrl.net](mailto:k6agf@arrl.net) 12/09

**Victor Valley ARC.** P.O. Box 869, Victorville, CA 92392. Meets 2nd Tue./monthly, 7 p.m., Lewis Ctr., 17500 Mana Rd., Apple Valley, CA. Talk-in 146.94(-), PL 91.5. Net Sun. 7 p.m. 146.94(-), [www.vvarc.org](http://www.vvarc.org) 01/10

## CONNECTICUT

**Boulder Amateur Radio Club (BARC)** Meets 3rd Tues. monthly, 7 p.m., Bld J, Boulder Municipal Airport or Vailmont Community Presbyterian Church, 3262 N. 61st St., Boulder, CO. Talk-in: 146.70(-) Info: [BARC70@arrl.net](mailto:BARC70@arrl.net) or [www.qsl.net/w0dk/](http://www.qsl.net/w0dk/) 11/09

**Denver Radio Club (DRC)** meets 3rd Wed, 7:30 p.m., St. Joseph Episcopal Church, 11202 West Jewell, Lakewood, CO. Learning/Tech sessions 6:30 p.m. Oldest club in Colorado (1917). Net Sun 8:30 p.m. 145.490 rptr.; [w0tx@arrl.net](mailto:w0tx@arrl.net); [www.w0tx.org](http://www.w0tx.org) 4/10

## CONNECTICUT

**Connecticut DX Association, (CTDXA).** Meets at ARRL HQ, Newington, CT. 1st Wed. (except Summer) 7:30 p.m. Contact Dan, W1ZTQ; 860/583-1165 11/09

## FLORIDA

**Englewood ARS.** P.O. Box 572 Englewood, FL 34295. Meets 3rd Thurs./monthly 7:30 p.m. Englewood United Methodist Church, 700 E. Dearborn St., Englewood, FL, Rm: Fellowship Hall. Info. Vic Emmelkamp, K4VHX, 941/473-5560 or [www.earsradioclub.org](http://www.earsradioclub.org). 11/09

## HAWAII

**Honolulu ARC** meeting 0900 for breakfast in Jan, Mar, May, Jul, Sep and Nov at the Sizzler Restaurant at Pearl Ridge. Contact John, K1ER, 808/484-9748. 4/10

## ILLINOIS

**Bolingbrook ARS** meets 3rd Mon., monthly, 7:00 p.m. at Bolingbrook Fire Station Number 5 on Rodeo Dr. Talk-in is usually 147.33 MHz +0.600. ARRL affiliated club number: 1271. Club web page is [www.k9bar.org](http://www.k9bar.org). 10/09

**Fox River Radio League, www.frrl.org.** Open meeting 2nd Tue./7:30 p.m. Rasmussen College, 2363 Sequoia Dr., Aurora, IL 60506; 147.21 MHz (+600 kHz), 103.5 Hz, 444.30 MHz (+5 MHz, 114.8 Hz, IRLP), 2M net Tue. 7:30 p.m., except 2nd Tue. P.O. Box 673, Batavia, IL 60510-0673. 11/09

**Peoria Area ARC, (PAARC).** P.O. Box 3508, Peoria, IL 61612. Meets 2nd Fri./monthly, 7 p.m., Red Cross Chapter House, 311 W. John Gwynn Jr. Ave., Peoria, IL. Superfest each Sept. Rptrs: 147.075(+), 146.85(-). D-STAR: 144.505 (+), 448.46875 (-), 1272.4000(+). Web: [www.w9uvi.org](http://www.w9uvi.org); e-mail: [w9uvi@arrl.net](mailto:w9uvi@arrl.net). Voice mail: 309/692-3378. 12/09

**The Starved Rock RC, W9MKS.** P.O. Box 198, Tabor St., Leonore, IL 61332. Meets 1st Mon./monthly, 7 p.m. Rptr. net 7 p.m. Wed./weekly, 147.12(+). PL 103.5. [www.w9mks.org](http://www.w9mks.org); [www.qsl.net/w9mks](http://www.qsl.net/w9mks) 12/09

**Wheaton Community Radio Amateurs** meets 1st Fri/monthly, 7:30 p.m., First Presbyterian Church (Jefferson & Ellis streets), Wheaton. All are welcome. See our website at [www.w9ccu.org](http://www.w9ccu.org) for all club info or call 630/604-0157. Annual Hamfest each January. Rptrs: 145.390 (-) 107.2, 444.475 (+) 114.8. 9/09

## MAINE

**Saint Croix Valley ARC** meets at the Calais Methodist Home, 10 Sunrise Circle, Calais, ME, 04619, third Sunday of each month, 6:30 p.m.. Contact Mike Breckinridge N1JXP, 207/454-8571. 9/0

## MASSACHUSETTS

**Boston ARC** meets 3rd Thurs. 7:00 p.m. (except July/Aug), Salvation Army Boston HQ, 147 Berkeley St. Boston, MA. Free parking in adjacent lot. Talk-in: 145.23MHz (-) PL 88.5, [www.barc.org](http://www.barc.org), email: [w1bos@arrl.net](mailto:w1bos@arrl.net). 12/09

**Framingham Amateur Radio Association** meets 1st Thurs., 7:30 p.m., Sept-June in the basement of the Danforth Museum, Framingham, MA. Contact Gordy, K1GB, 781/891-5572; [k1gb@arrl.net](mailto:k1gb@arrl.net) 01/10

## MICHIGAN

**Genesee County Radio Club, Inc.** Meets 3rd Tues. of the month during school year. 7:30 p.m. Davison High School, 1250 N. Oak Rd., Davison, MI 48423; [www.qsl.net/w8acw/](http://www.qsl.net/w8acw/), e-mail: [w8acw@arrl.net](mailto:w8acw@arrl.net). 10/09

**Hiawatha ARA of Marquette Co.** P.O. Box 1183, Marquette, MI 49855. Meets 1st Thurs./monthly, 7:30 p.m. Marquette County Health Department, R. Schwenke, N8GBA, 906/249-3837; [www.qsl.net/k8lod](http://www.qsl.net/k8lod) 12/09

## MONTANA

**Yellowstone Radio Club** meets 3rd Mon except July-Aug., 7:30 p.m., North Park Center, 19th & 6th Ave., N., Billings, MT. Contact 147.36/100 Hz tone. Box 883, Billings, MT 59103. Testing odd months, 3rd Sat.; <http://www.k7efa.org/> 09/09

## NEW JERSEY

**Gloucester County ARC** meets 7:30 p.m. 1st Wed./monthly, Pfeiffer Community Center, Blue Bell Rd. & Main St., Williamstown, NJ 08094. Contact Ken Newman, N2CQ, P.O. Box 370, Pitman, NJ 08071; 856/848-4345; [n2cq@comcast.net](mailto:n2cq@comcast.net); <http://www.w2mmd.com> 10/09

## NEW YORK

**Hall of Science ARC.** P.O. Box 150131, Kew Gardens, NY 11415. Meets 2nd Tue./monthly, Hall of Science Bldg., 47-01 111 St., Flushing Meadow Park, 8:00 p.m. Rptr. 444.200 PL 136.5. Info: Voice mail 718/760-2022; [www.hosarc.org](http://www.hosarc.org) 10/09

**Orleans County ARC, (OCARC).** Meets at the Orleans County EMO 14064 W. County House Rd., Albion, NY 14411, 2nd Mon./monthly 7:30 p.m. Contact: Marion Toussaint, KA2BCE, 585/798-0861. 1/10

## OHIO

**Clyde ARS (CARS)** meets 1st Tue./monthly, 7:30 p.m., Municipal Bldg., Clyde, OH 43410. NF8E rptr. 145.35(-) and 442.625(+) MHz. Net Sun. 9 p.m. Info: E. Remaley, KA8CAS. 10/09

## OREGON

**Umpqua Valley ARC, Inc.** P.O. Box 925, Roseburg, OR 97470. Meets 3rd Thurs./monthly, 7:00 p.m., Douglas County Court House, #310, Roseburg, OR. Info: K7AZW 541/679-9338 or 146.90(-)(PL100), <http://www.aa7gc/uvarc/index.html> 12/09

## PENNSYLVANIA

**RF Hill ARC** meets 7:30 p.m. last Thurs/monthly, Perkasio Fire Company, 5th St., Perkasio, PA. Info: Jim Soete, WA3YLQ, 215/723-7294; [wa3ylq@hotmail.com](mailto:wa3ylq@hotmail.com); [www.rhill.ampr.org](http://www.rhill.ampr.org) 12/09

**Washington Amateur Communications Radio Club (WACOM)** meets 1st Thur/monthly, 7:30 p.m., Washington Co. Bldg., 100 Beau St., Washington, PA 15301. Contact Elmer Plants, N3TIR, 724-484-0207. 145.490. [www.wacomarc.org](http://www.wacomarc.org) 11/09

## VIRGINIA

**Mt. Vernon ARC, K4US (MVARC).** Meets 2nd Thurs./monthly (except Jul. & Dec.), 7:30 p.m., INOVA Mt. Vernon Hospital, 2501 Parkers Ln., Alexandria, VA. Contact: Bob, KT4KS, 703/765-2313 or 146.655-. 10/09

## WASHINGTON

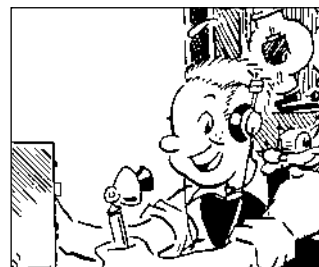
**San Juan County Amateur Radio Society** meets 2nd Fri./monthly 11:30 a.m., Friday Harbor Firehouse. Serving hams throughout the San Juan Islands, Washington, we welcome members and visitors to our weekly nets, Wed. 8:00 p.m. local, through linked repeaters N7JN, 145.250MHz PL 133.8 Hz & 443.45MHz PL 103.5 Hz & CW @ 7:30 p.m. local on 3710 kHz or nearby. Contact Dan Drath, N6AU, for more information; [drathmarine@rockisland.com](mailto:drathmarine@rockisland.com) 11/09

## WEST VIRGINIA

**Tri-State ARA** meets 3rd Tues./monthly, 7 p.m., Museum of Radio & Tech., 1640 Florence Ave., Huntington, WV 25701; 304/525-8890. 9/09

## WYOMING

**University ARC N7UW,** University of Wyoming, Dept. 3625, 1000 E. University Ave., Laramie, WY 82071 meets 1st Tues/monthly in the Wyoming Student Union room 2 or 10 at 7:30 p.m. local time. All interested persons are welcome. [johnmh@uwyo.edu](mailto:johnmh@uwyo.edu) 12/09



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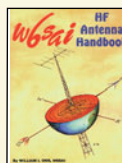
## Heathkit - A Guide to the AR Products

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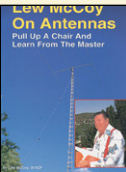
## The NEW Shortwave Propagation Handbook

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by Dave Ingram, K4TWJ

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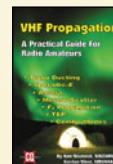
## VHF Propagation

### A Guide For Radio Amateurs

by Ken Neubeck, WB2AMU & Gordon West, WB6NOA

A comprehensive source-book on VHF propagation by two great authors! Here's a sampling of what you'll find inside:

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- Meteor Scatter • TEP
- Sporadic-E • Combo Modes



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# VE EXAMS

As a service to our readers, WorldRadio Online presents a feature listing of those VE exams, times and locations which are sent to us. Please remember that our deadline for publication is two months in advance. For example, if your VE group is scheduling an exam for December, please have the information to us by October 1st. World Radio Online, VE Exams, 25 Newbridge Road, Hicksville, NY 11801 .List the location (city and state), any information examinees should have (advance registration, etc.) and the name of the person to contact for further information. Examinees should bring their original license (along with a photo copy), two forms of identification (at least one should be a photo), and required fee.

p/r pref. = pre-register preferred but w/i OK  
p/r = pre-registration only-no w/i

w/i = walk-in only  
w/i pref. = w/i preferred to p/r

CITY	DATE	CONTACT	NOTES	CITY	DATE	CONTACT	NOTES
<b>ARIZONA</b>				<b>MISSISSIPPI</b>			
Mesa	3rd Mon	Steve KY7W, 480-804-1469, kj7wk@cox.net	w/i	Harrison County	1st Sat	Don, W5DJW, 228-868-5670, donw5djw@bellsouth.net	w/i ok
<b>ARKANSAS</b>				<b>NEVADA</b>			
Harrison	2nd Sat	Bob, AJ5C, 870-365-3871, aj5c@cox.net		Stagecoach	2nd Sat	Jack, AC6FU, 775-577-2637, acfu@arrl.net	w/i ok
Sherwood	3rd Sat	Daryl, AE5WX, 501-227-9183, ae5wx@arrl.net	w/i ok	<b>NEW JERSEY</b>			
<b>CALIFORNIA</b>				Bellmawr	3rd Thurs	Diane, N2LCQ, 609-227-6281	p/r
Highland	9/19	Ed , WU6I, 909-864-0155, wu6i@arrl.net	p/rw/I ok	Roselle	9/26	Gerry, AA2ZJ, 732-283-2795, aa2zj@arrl.net	
Long Beach	3rd Sat	Louise, N6ELK, 562-429-1355	p/r	<b>NEW YORK</b>			
Manteca/Tracy	4th Sat	David, N5FDL, 209-835-6893, n5dfl@arrl.net	p/r	Canandaigua	1st Wed	Squaw Island ARC, David A. Foster, 585-398-0216, D1161F@aol.com	w/i
Mission Viejo	Call	Ernie Sensor, W6ETS, 949-458-2504, w6ets@aora.org, www.soara.org	p/r pref.	Canandaigua	1st Wed	David Foster, 585-398-0216, www.siarc.us	w/i
Redwood City	9/19	Al, WB6IMX@arrl.net, www.amateur-radio.org	w/i	Yonkers	9/6	Paul, AC2T, 914-237-5589, w2yrc@hotmail.com, www.yarc.org	w/i ok
Sacramento	Hotline!	916-492-6115, n6na@arrl.org		<b>OHIO</b>			
San Francisco	9/13	Dave, NE5EE full details: hamcrams.com	w/i ok	Cincinnati	1st Sat	Dale, KC8HJL, 513-769-0789	p/r pref
Santa Rosa	Hotline!	Hotline-Recording 707-579-9608		Sandusky	9/15	Luther, N8HC, 419-684-7864, n8hc@arrl.net	p/r
Sebastopol	Hotline!	Recording 707-579-9608		<b>OREGON</b>			
Sunnyvale	9/13	Gordon, W6NW, Sv@amateur-radio.org, www.amateur-radio.org	w/i	Astoria	Call!	AA7OA, 503-338-3333	p/r
<b>FLORIDA</b>				Bend	Weds	Joe, K7SQ, 541-385-3152	p/r
Melbourne	1st Sat	John, AA8IS@earthlink.net, 321-412-2779	w/i ok	Lincoln City	1st Sat	Carl, w7i@arrl.net, 503-965-7575	w/i ok
North Port	Call	Bill Norris, KC7TSG, 941-426-0214	w/ipref.	McMinnville	Call!	Mark, AC7ZQ, 503-843-3580	w/i only
St. Pete	Call	Mark, NP3R, 727-528-0071	w/i pref.	Sisters	Call!	Dave, N7TYO, 541-549-7831	p/r
<b>GEORGIA</b>				Tigard	Call!	John, KS0F, 503-626-7399	p/r
Athens	Last Mon	Ed, FUQUA, 706-354-1727	w/ipref.	<b>PENNSYLVANIA</b>			
<b>HAWAII</b>				Erie	3rd Sat	Ron, KB3QBB, 814-833-6829, kb3qbb@arrl.com, www.wattsburg-wireless.us	p/r
Oahu	Call	Lee, KH6BZF, 808-247-0587, 808-551-3494, leewical@aol.com	p/r	Pittsburgh	9/12	Bob Benna, N3LWP, 412-366-0488, n3lwp@verizon.net	
<b>ILLINOIS</b>				<b>PUERTO RICO</b>			
Bolingbrook	3rd Sat	Dale, W9KHX, 815-723-3332	w/i ok	San Juan	Last Sat	Hotline: 787-789-4998, prarl@prarl.org	w/i
Burr Ridge	Any Day	Argonne ARC, W9DS, 630-986-0061	p/r	<b>SOUTH CAROLINA</b>			
Huntley	4th Sat	Jerry Dubin, N9MXT, 847-815-9407	w/i ok	Charleston	3rd Wed	Robert Johnson, ae4rj@amsat.org; www.qsl.net/wa4usn/	w/i
Roselle	2nd Tues	Sam, W9SFB, 630-894-0708, w9sfb@aol.com	p/r	Charleston	2nd Sat	Riley Stone, 843-832-9105, k4hyy@sc.r.com	w/i
<b>INDIANA</b>				<b>VIRGINIA</b>			
South Bend	3rd Mon	Alan, NY9A, 574-232-6883	p/r	Alexandria	2nd Sat	John, WZ4A, 703-971-3905, wz4a@arrl.net	w/i
<b>MASSACHUSETTS</b>				Stafford	Sat	Bart, N3GQ, 540-373-4506, n3gq@arrl.net, www.qsl.net/semcomm	p/r
Brookline	2nd Mon	Dick Doherty, KA1TUZ, 617-527-2968, ka1tuz@arrl.net, www.barc.org	w/i ok	<b>WASHINGTON</b>			
Chelmsford	2nd Wed	Bruce, w1lus@att.net	w/i	Tacoma	2nd Tues	Radio Club of Tacoma, 253-759-2040, www.w7dk.org	
<b>MICHIGAN</b>				Vancouver	Hotline!	CCARC, 360-896-8909	p/r
Corunna	4th Thur	Tom, KI8AS, 517-579-0599, www.w8qqq.org	p/r pref.	Vancouver	9/19	Vancouver ARC-Clark County, ai9q@arrl.net Wayne 360-892-5580	
<b>MINNESOTA</b>				<b>WEST VIRGINIA</b>			
Apple Valley	2nd Thur	Jim, N0OA, 612-384-7709, N0OA@arrl.net	p/r pref.	Parkersburg	2nd Mon	Dana Pickens, WV8G, 304-422-6101	w/i, p/r
				<b>WISCONSIN</b>			
				Tomahawk	Last Sat	Terry, KB9AUP, 715-453-4633, dcollins@newnorth.net	w/i ok

**Add your local VE Exam information to this FREE monthly listing!**  
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# HAMFESTS & SPECIAL EVENTS

## SEPTEMBER

### CALIFORNIA

**Route 66 OTA 10th Anniversary Special Event**, Seventeen clubs operating nineteen stations in and around the Old Rte 66 Hwy. Official station calls will be W6A - W6R and include W6W. Operating 12 Sept (0001Z) to 20 Sept (2400Z) on frequencies found in the vicinity of those ending in "66", e.g., 7.266. More info: [www.w6jbt.org](http://www.w6jbt.org)

### CONNECTICUT

**Western CT Hamfest** - Sept 13, 8:30 AM to 12:30 PM at the Edmond Town Hall, 45 Main Street (Rt. 6), Newtown, CT. Dealers, flea market, tailgating, seminars, raffle, refreshments, Contact Joe de Groot, AB1DO, 30 Sunnyview, Dr., Redding, CT 06896, 203-938-4880. [www.danbury.org/cara/hamfest.html](http://www.danbury.org/cara/hamfest.html)

### MINNESOTA

**Special Event - Cold War Memorial from the site of B-52D crash on Sept 16, 1958**- Sept 12, 1500Z-0300Z, Inver Grove Heights, MN SE Metro ARC, W0B. 21.352, 14.252, 7.252, 3.952. Certificate SASE. [www.semarc.org](http://www.semarc.org)

### NEW JERSEY

**Special Event Station - N2UL** - Sept 7, 1200z - 2400z - commemorating CQ Labor Day. More info: Harry, KB2MDO 908-241-4904

**NADXA 1st Annual Hamfest** - Sept 13, 8 AM, Luigi's Restaurant Parking lot, corner of Asbury Ave & Shafto Rd., Tinton Falls, NJ. More info: Mike, KC2Q 908-415-6162, email [nadxa@juno.com](mailto:nadxa@juno.com).

**Gloucester County ARC Hamfest** - Sept 20, 8 AM - 2 PM. Gloucester County 4H Fairgrounds, Mullica Hill, NJ. More info: [www.hamfest.w2mmd.com](http://www.hamfest.w2mmd.com), phone 856-513-0407.

### NEW YORK

**ARAST 34th Annual Hamfest** - Sept 26, 0700 - 1400. Chemung County Fairgrounds. Free fleamarket. More info, including ticket and table space purchase: [www.arast.org](http://www.arast.org).

### OHIO

**67th Findlay OH Hamfest** - Sept 13, 8 AM, Hancock County Fairgrounds, Findlay. More info: [www.findlayradioclub.org](http://www.findlayradioclub.org).

**GCARA 73rd Hamfest** - Sept 20, 8 AM. Diamond Oaks Career Development Ctr., 6375 Harrison Ave., Cincinnati. More info: Stan, W8QDQ 513-531-1011, [stanco49@zoomtown.com](mailto:stanco49@zoomtown.com).

### SOUTH DAKOTA

**Pierre ARC Hamfest** - Sept 19, 9 AM - 3 PM, with an equipment auction. At the Pierre Senior Center, 401 West Pleasant Dr, Pierre. VE testing begins at 4 PM. More info: Dave, W0NWT, [eaglewings150@yahoo.com](mailto:eaglewings150@yahoo.com).

### UTAH

**Special Event Station** - Sept 3 through Sept 14 - 0000z - 23590z - K7T, Salt Lake City. Commemorating the 82nd anniversary of the invention of the electronic TV by Philo T. Farnsworth, a Utah pioneer. QSL for s.a.s.e, Wesley Wilkinson, W7WES, 7363 Galaxy Hill Rd., West Jordan, UT 84081

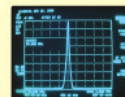
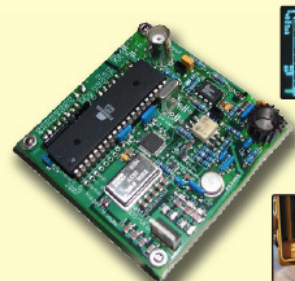
### VIRGINIA

**Special Event Station** - Sept 12 - 1400z - 2200z - in celebration of the 150th Anniversary of the arrival of the railroad to Hendon in Sept 1859. QSL with s.a.s.e - Bill McCourt, 1554 Twisted Oak Drive, Reston, VA 20194.

**Click here for information on listing your special event or hamfest in an upcoming next issue of WorldRadio Online!**

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## CONTEST CORNER

### CONTEST: MI QRP Labor Day CW Sprint

DATE & TIME: 2300Z 7 Sep - 0300Z 8 Sep

BANDS/MODE: 160-6M CW

POINTS: 2 Pts. W/VE non-members; 4 Pts. DX non-members; 5 Pts. member sta QSOs

MULTIPLIERS: States/Provinces/Countries on all bands

EXCHANGE: RST + QTH + MI-QRP number (non-members give power)

ENTRY CATEGORIES: A = <250mW; B = 250mW - 1W; C = 1-5W; D = >5W

ENTRIES: 30 days Hank Greeb, N8XX, 5727 11 Mile Rd., NE, Rockford, MI 49341-9502 E-mail: n8xx@arrl.org

Web page: [www.qsl.net/miqrpclub/contest.html](http://www.qsl.net/miqrpclub/contest.html)

### CONTEST: All-Asian DX

DATE & TIME: 0000Z 5 Sep - 2359Z 6 Sep

BANDS/MODE: 160-10M SSB

POINTS: 1 Pt. 40-15M; 2 Pts 80 or 10M; 3 Pts. 160M

MULTIPLIERS: Asian prefixes on each band

EXCHANGE: OMs give RST + age; YLs give RST + age (or "00" if desired)

ENTRY CATEGORIES: Single op, Single band; Single Op, Multi-band;

Multi-Multi (NOTE: Asian sta's may use high or low power (100W or less), Non-Asian stations use high power only)

ENTRIES: 30 days JARL All Asian DX Phone Contest 170-8073 Tokyo, Japan

E-mail: [aaph@jarl.or.jp](mailto:aaph@jarl.or.jp) Rules at: [www.jarl.or.jp/English/4\\_Library/A-4-3\\_Contests/2009AA\\_Rule.htm](http://www.jarl.or.jp/English/4_Library/A-4-3_Contests/2009AA_Rule.htm)

Log forms at: [www.jarl.or.jp/English/4\\_Library/A-4-3\\_Contests/aadxlog.pdf](http://www.jarl.or.jp/English/4_Library/A-4-3_Contests/aadxlog.pdf)

### CONTEST: AGCW Straight Key Party

DATE & TIME: 1300-1600Z 5 Sep

BANDS/MODE: 40M CW

POINTS: 9 Pts. A to A; 7 Pts. A to B; 5 Pts. A to C; 4 Pts. B to B; 3 Pts. B to C; 2 Pts. C to C

MULTIPLIERS: None

EXCHANGE: RST + Serial # + Category + Name + Age (YLs can give "XX" for age)

ENTRY CATEGORIES: A = <5W; B = 5-50W; C = 50-150W

ENTRIES: 30 Sep. Friedrich W. Bafri, DF1OY Moselstr. 17b D-63322

Rodermark-Uerberach Germany

E-mail: [htp@agcw.de](mailto:htp@agcw.de) Web page: [www.agcw.de](http://www.agcw.de)

Rules at: [www.agcw.org/agcw-con/2007/Englisch/htp\\_e.htm](http://www.agcw.org/agcw-con/2007/Englisch/htp_e.htm)

### CONTEST: North American Sprint

DATE & TIME: 0000-0400Z 13 Sep

BANDS/MODE: 80/40/20M CW

POINTS: 1 Pt. per QSO

MULTIPLIERS: States (no KH6!)/CA provinces/NA countries (USA and Canada do not count as countries!)

EXCHANGE: Both calls + Serial # + Name + QTH

ENTRY CATEGORIES: Single op - QRP (<5W), Low (5-100W), High (>100W)

ENTRIES: 30 days Boring ARC 15125 Bartell Road Boring, OR 97009 E-mail: [cwsprint@ncjweb.com](mailto:cwsprint@ncjweb.com)

Cabrillo logs (preferred to: [www.ncjweb.com/sprintlogsubmit.php](http://www.ncjweb.com/sprintlogsubmit.php) Paper log to

Cabrillo converter at: [www.b4h.net/cabforms/nasprintcw\\_cab.php](http://www.b4h.net/cabforms/nasprintcw_cab.php)

Rules at: [www.ncjweb.com/sprintrules.php](http://www.ncjweb.com/sprintrules.php)

### CONTEST: WAE DX

DATE & TIME: 0000Z 13 Sep - 2359Z 14 Sep

BANDS/MODE: 80-10M SSB

POINTS: 1 Pt. per QSO

MULTIPLIERS: WAE countries

EXCHANGE: RST + serial #

ENTRY CATEGORIES: Single op - Low (<100W); Single op - High (>100W); Multi op

ENTRIES: 30 days WAEDC Contest Manager Bernhard Buettner, DL6RAI

Schmidweg 17 D-85609 Dornach Germany ASCII to: [waedc@dar.de](mailto:waedc@dar.de)

E-mail: [dl6rai@dar.de](mailto:dl6rai@dar.de) Web: [www.waedc.de](http://www.waedc.de)

### CONTEST: QCWA Fall QSO Party

DATE & TIME: 1800Z 19 Sep - 1800Z 20 Sep

BANDS/MODE: 160-UHF, QSONET, All modes

POINTS: 1 Pt. Phone; 2 Pts. CW/Digital

MULTIPLIERS: QCWA chapters, states, provinces, countries; x3 HQ Stn W2MM QSO

EXCHANGE: Call + Yr licensed + name & chapter + State/Province/Country

ENTRY CATEGORIES: CW; Digital; Phone; Mixed

ENTRIES: 31 Oct. Bob Buus, W2OD, 8 Donner St., Holmdel, NJ 07733-2004

E-mail: [w2od@aol.net](mailto:w2od@aol.net)

Rules at: <http://www.qcwa.org/2009-qso-party-rules.htm>

### CONTEST: Washington Salmon Run

DATE & TIME: 1600Z 19 Sep - 0700Z 20 Sep; 1600-2359Z 20 Sep

BANDS/MODE: 160-6M CW, Digital & SSB

POINTS: 2 Pts SSB; 4 Pts CW/Digital modes

MULTIPLIERS: non-WA stas count 39 WA counties; WA stas count states/CA Provinces/DXCC countries

EXCHANGE: RS(T) + QTH (WA stas give county)

ENTRY CATEGORIES: Single Op High/Low/QRP; Multi Op; WA Mobile; WA Expedition; WA Club

ENTRIES: Western Washington DX Club, P.O. Box 395 Mercer Island, WA

98040 Cabrillo: [salmonrun@wwdxc.org](mailto:salmonrun@wwdxc.org); E-mail: [salmonrun@wwdxc.org](mailto:salmonrun@wwdxc.org)

Web page: [www.wwdxc.org/salmonrun](http://www.wwdxc.org/salmonrun)

### CONTEST: Run for the Bacon

DATE & TIME: 0100-0300Z 20 Sep

BANDS/MODE: 160-10M CW

POINTS: 1 Pt. non-member QSO; 3 Pts. FP member; 5 Pts. FP member different continent

MULTIPLIERS: States/Provinces/Countries

EXCHANGE: RST + State/Province/Country + FP #; (non-members give power)

ENTRY CATEGORIES: None given

ENTRIES: Online reporting only at: [www.fqqr.com/autolog.php](http://www.fqqr.com/autolog.php)

Rules at: [www.fqqr.com/fqqrprun.php](http://www.fqqr.com/fqqrprun.php)

### CONTEST: North American Sprint

DATE & TIME: 0000-0400Z 20 Sep

BANDS/MODE: 80/40/20M SSB

POINTS: 1 Pt. per QSO

MULTIPLIERS: States (no KH6!)/CA provinces/NA countries (USA and Canada do not count as countries!)

EXCHANGE: Both calls + Serial # + Name + QTH

ENTRY CATEGORIES: Single op - QRP (<5W), Low (5-100W), High (>100W)

ENTRIES: 30 days Jim Stevens K4MA 6609 Vardon Ct.,

Fuquay-Varina, NC 27526

E-mail: [ssbsprint@ncjweb.com](mailto:ssbsprint@ncjweb.com) Cabrillo logs (preferred) to:

[www.ncjweb.com/sprintlogsubmit.php](http://www.ncjweb.com/sprintlogsubmit.php)

Paper log to Cabrillo converter at:

[www.b4h.net/cabforms/nasprintssb\\_cab.php](http://www.b4h.net/cabforms/nasprintssb_cab.php)

Rules at: [www.ncjweb.com/sprintrules.php](http://www.ncjweb.com/sprintrules.php)

### CONTEST: NAQCC Sprint

DATE & TIME: 0130-0330Z 17 Sep

BANDS/MODE: 80-20M CW

POINTS: 1 Pt. non-member QSO; 2 Pts. member QSO

MULTIPLIERS: States/Provinces

EXCHANGE: RST + State/Province/Country + Member # (non-members give power)

ENTRY CATEGORIES: Single Op, Single XMTR only!

ENTRIES: 4 days John Shannon, K3WWP, 478 High St., Kittanning, PA 16201

E-mail: [naqcc33@alltel.net](mailto:naqcc33@alltel.net) (Submit log as plain text, NO attachments!)

Rules at: [www.arm-tek.net/~yoel/sprint\\_rules.html](http://www.arm-tek.net/~yoel/sprint_rules.html)

Autologger (preferred) at: [www.arm-tek.net/~yoel/sprint\\_submit\\_log.html](http://www.arm-tek.net/~yoel/sprint_submit_log.html)

### CONTEST: CQ WW RTTY DX

DATE & TIME: 0000Z 27 Sep - 2359Z 28 Sep

BANDS/MODE: 80-10M RTTY

POINTS: 1 Pt. per QSO

MULTIPLIERS: States/VE call areas/ARRL-WAE countries/CQ zones

EXCHANGE: US/VE stas give RS(T) + state or CA call area; All others give RS(T) + CQ zone

ENTRY CATEGORIES: Single op - single band; single op - multiband; Multi op - multiband (Single op stas may use low power (>150W) if desired - will be scored as a separate category)

ENTRIES: CQ/RJ WW RTTY Contest, 25 Newbridge Road,

Hicksville, NY 11801

E-mail: (Cabrillo preferred) - [wwrtty@kkn.net](mailto:wwrtty@kkn.net)

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# WorldRadio

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**FOR SALE by owner:** Colorado DX acreage and home. 20 irrigated acres, 5 bedroom, 5 1/2 bath home, 4 car garage, 40 foot tower with tribander and 90 foot tower with 2 element 40 meter beam. No antenna restrictions. Located between Aspen and Vail. \$939,000. for more info call Pat, KV0K 970-379-3363 or pat@glenwoodbrokers.com.

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**CERTIFICATE FOR PROVEN TWO-WAY RADIO CONTACTS** with amateurs in all 10 USA call areas. Award suitable to frame and proven achievements added on request. Send SASE to W6LS, 45527 3rd St. East, Lancaster, CA 93535-1802 to get data sheet. F00

**WANTED FOR MUSEUM: PRE-1980 MICRO-COMPUTERS**, also early-micro-computer journals, newsletters and advertising literature. KK4WW, P.O. Box 179, Floyd, VA 24091; 540/763-2321, 540/745-2322. 108-x09

**BEAM HEADINGS** from your QTH to over 400 USA & Worldwide locations \$20.00. DX-ENGINEERING SYSTEMS INC., P.O. Box 1934 Middleburg, VA 20118-1934; w4het@aol.com. xxx

**FOR SALE: CQ/HAM RADIO/QST/73** magazines and binders. SASE brings data sheet. W6DDB, 45527 Third Street East, Lancaster, CA 93535-1802. F00

**ELECTRON TUBES:** Transmitting, receiving, military obsolete...all types. Large inventory. Fast delivery. DAILY ELECTRONICS, P.O. Box 822437, Vancouver, WA 98682-0053; 360/896-8856, 800/346-6667, fax 360/896-5476; e-mail: daily@worldaccessnet.com; website: www.dailyelectronics.net. 908-909

**FOR SALE: REPEATERS, HARDLINE, GOOD STUFF.** See our website: www.GNARC.org. Greater Norwalk Amateur Radio Club 109-210

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# TAK-tenna

Kurt N. Sterba

A reader of Krusty Olde Kurt's Kolumn wants to know what Kurt thinks of the TAK-tenna. This is a very very short dipole (0.034 wavelength long) with a flat coil on each end. The dipole in the 40-meter version is 26 inches long. The end coils are 32 inches in diameter. For a picture, see [www.TAK-tenna.com](http://www.TAK-tenna.com) or Gordon West's article in April CQ. The purpose of the tiny antenna is to allow an amateur with practically no space for an antenna to have an antenna. It is a single-band antenna with versions available for any band from 40 through 10 meters.

The end coils provide inductive loading, to resonate the antenna on the band. They also improve the efficiency of the dipole. A 0.034 wavelength dipole has a radiation resistance of less than 2/10 ohm. With the end loading, Kurt estimates a radiation resistance of about 8/10 ohm. The bandwidth of such an antenna with no losses would be very narrow. However, the TAK-tenna has a 3-dB bandwidth of 200 KHz on 40 meters, indicating loss resistance. With a radiation resistance of less than an ohm, it does not take much loss resistance to lower the efficiency. This is not a high efficiency antenna, but it is really small.

Why are the loading coils on the end of the dipole? With the very low radiation resistance, coils close to the center would have high current running through them and have large losses. Out at the end the current is much less and losses will be less. Another advantage of end coils is that they give a way to feed the antenna at a 50-ohm point to match standard coax. Trying to feed the antenna at the center would give a high SWR. Building a low-loss matching device would be difficult. But as you move away from the center, the feed-point impedance goes up. At the end of a 26-inch dipole, the impedance would still be low but as you move up the end coil, the impedance gets higher and finally you can find a 50-ohm feed-point. Because of the rapid change in impedance as you move up the coil, finding the correct take-off point will be tricky as many users attest.

So how well does it work? Testimonials say it works great. But these are not the same as field strength measurements. Several users report signals to be about two "S" units below a comparison dipole. This indicates about 12-dB loss. Put 100 watts in and get about seven watts out. Of course these readings are not accurate field strength readings either, but they sound about right to Kurt considering the small size of the antenna. Before you let this low efficiency upset you, Kurt asks, "Where else can you find an antenna this small that works better?" If you are limited in space and cannot otherwise put up an antenna due to restrictions from your homeowner's association this may be the one for you.

Krusty Olde Kurt commends the manufacturer for what he has not put in his advertising. There are no claims of breath-taking advances in technology or new physical principles that are not bound by traditional science or any other such rot that accompanies many new antennas. Instead, it is presented as a major improvement on an existing antenna design.

## Double Bazooka Antenna

First, a little history. The original bazooka was a musical instrument invented by a vaudeville comedian Bob Burns. He copyrighted the name bazooka in 1920. The instrument was made of two pieces of gas pipe that worked like a slide trombone. A whiskey funnel was the bell. It is a bit of a stretch to call it a "musical" instrument, but it could produce at least a half-dozen different notes. Burns played it on the radio during the 1930s. In the 1940s, during the second World War, the army developed an anti-tank rocket launcher that consisted of a piece of pipe. Instead of using the long official name, soldiers dubbed it the "Bazooka" from its similarity to Burns' musical instrument. Also during the war, an English radio engineer invented the balun that consisted of a quarter-wave length of pipe that surrounded the coaxial cable at the antenna feed-point. This became known as the "Bazooka Balun."

The Bazooka Balun's quarter-wave length of pipe was open at the top and

closed at the bottom. This made a quarter-wave stub, which shows a high impedance at the open end, thus preventing any RF current from flowing back down the coax shield. At frequencies below resonance, the stub is inductive while a dipole is capacitive. This gave M.I.T. engineers the idea of using this to counteract the impedance change of an off-resonant dipole thus giving wider SWR bandwidth. This is the Double Bazooka antenna. It is a horizontal length of coax with the outer shield cut in the center. The shield is a dipole antenna. The quarter-wave inner portion of the coax makes two resonant stubs that are in series and connected across the antenna feedpoint. The velocity factor of the coax makes the stubs resonant at a shorter length than the antenna on the outside. So an extra length of (usually) open wire line is added at each end to resonate the antenna. W8TV described the amateur version of the antenna in 1968 QST.

Eight years later Walt Maxwell, W2DU, in QST and Ham Radio Magazine articles explained that the implementation of the Double Bazooka was incorrect. A dipole looks like a series resonant circuit. If you put an opposite reactance in series, the reactances cancel and you get the desired result. But the stubs in the Double Bazooka are in parallel with the feedpoint. This cancels the reactances all right, but it increases the feedpoint resistance to possibly twice or more of the original. This sends up the SWR and you do not get any increase in bandwidth. But, the Double Bazooka does have higher bandwidth than a dipole. This is mainly because the coax shield is a lot larger than, say, a piece of #16 wire. Larger conductors give higher bandwidth.

International Antenna Company markets a Double Bazooka ([www.iacantennas.com](http://www.iacantennas.com)) that solves the mechanical problem at the center of the antenna by encapsulating the connections. Since there are no exposed wires, static from rain, hail, and dust storms is eliminated. Other sources of noise will come through as with any other antenna. There are no outrageous claims in the firm's advertising and Kurt commends them for that.