

April 2010

Zero Beat

www.hcra.org



Are you a member of AA?

How much ham radio activity have you participated in lately, say over the last thirty days? March has been a very busy amateur radio month. The flea market season has kicked off, sunspots are traversing the solar disk and every weekend has been filled with contests and operating events. Were you part of any of them? Or did you spend most of your time reading QST, watching YouTube videos or reading ham radio articles on the internet?

If you did, you just might be a member of AA, or "Armchair Amateurs". It's a common term in some other hobbies too - model railroaders that read books instead of build railroads are called 'Armchair Modelers' so it isn't much of a stretch to use a similar description for hams acting in a similar fashion. Sometimes it is far easier to sit back and read about others' exploits than to actually do it yourself. Easier, but not as much fun, that's for sure.

So what's the big deal? Knowledge is good, isn't it? Yes it is but like every other activity in life, balance is very important. An active ham that isn't well informed is many times called a 'lid' but if you spend all your time off the air you've unknowingly joined AA!

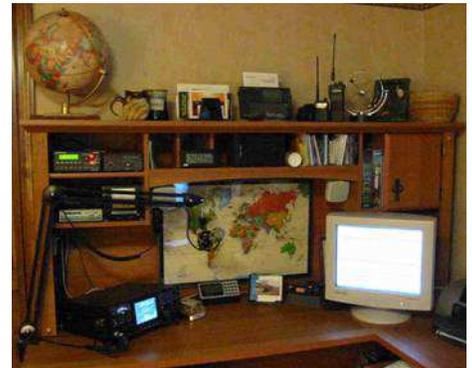
Interestingly this very subject came up at MassCon, a QRP convention that a number of HCRA members went to March 13th. Besides the obvious focus on QRP an underlying premise of the conference was 'Do It!' Scott, NE1RD, the organizer of the event repeatedly brought up the importance of 'doing things'; building, operating, mentoring, attending club meetings, introducing others to our fine hobby - I think you get the idea. If we all sat back and looked to the accomplishment of others it wouldn't be long before the only things written about ham radio were history articles!

Don't worry, we're not there yet as March's Show & Tell pointed out once again. With about a dozen entries and displays, from antenna launchers to SDR radios and Rock-Mites to homebrew exciters, demonstrated the creativeness of our members. KB1XG was the grand prize winner with a nicely executed portable audio mixer/relay station for remote video applications. I would say we all became winners because what Al and the other entrants did was excite others to try something new and different

So if you've become a charter member of AA during the months our sun has been sleeping now is the time to put your membership on the shelf and dive back into the fun and excitement of amateur radio. The HF bands have been consistently open day after day. The other morning I worked Australia and New Zealand on 40 meters with only 100 watts and a low, inefficient trap dipole. Not exactly what you would call a 'super station'

but it did the job! I challenge all our members to try something new this year. A different mode, a new or modified antenna, participating in Field Day, foxhunting - the list is long. I'll bet you can't try just one!

And while you're casting off the surly bonds of AA why pitch in to some HCRA activities as well? We've got some great meetings, a tailgate party and Field Day teed up and ready to go and all we need is you. Are you up for the challenge? Your participation adds to everyone's experience and all it takes is you.



Bylaw Revision

The bylaw revisions were passed by unanimous vote of the 37 members present at the March meeting. Thanks to the effort of the bylaw committee and your support of the changes HCRA is set to go forward with an appropriate set of bylaws for at least another decade. But the job doesn't stop here, if you feel further changes could be necessary please submit your suggestions to the board.

April's Meeting

Springtime is antenna time and our next meeting is aimed right at the subject. Dick Post, N7EMW, accomplished amateur and designer of a large array of antenna mounts and accessories is our guest speaker. N7EMW is an expert on mounting that HF/VHF/UHF antenna on anything that moves. Most of our mobile antennas have taken a beating over the winter, I know mine has. Now is the time to clean up your vehicle and antenna and maybe look at some different ideas for mounting at the same time. As always why not bring a friend to the meeting? Let's share the excitement and fun of amateur radio and maybe get some new hams at the same time. Add to that the chance to win a nice raffle prize and the camaraderie of the best group of hams in the valley and we know you will have a good time.

'73... see you at the meeting,
Jim, KK1W

HCRA Board of Directors Minutes

Board Members Present KK1W, AA1YW, W6IS, KC1V, KB1NWH, AND K1JAW

Guests: W1MSW

At Hampden Bank @ 1905L

OFFICER REPORTS

Vice President, Kx1x

No details on spring classes set at this time – will check available dates and report back next month.

Treasurer, KC1V

Current financial report: as of 2/16/2010
\$5579.05

Member count as of 2/16/2010 83 members

Secretary KB1PKJ

Not present– KB1NWH will take tonight's minutes

DIRECTOR REPORTS

Technical, AA1YW

Working on getting a group together to head to Otis to help a fellow ham with his station

Zero Beat, WB1DBY

Not Present Cutoff date for Zero Beat – February 21st

Membership, KB1NWH

Submitted new members for board approval.....K1PC, AND N1AND– moved, seconded and approved.

Bus/van rental information?

Mini van-7 passenger-\$40 a day-Unlimited Mileage-Basic Insurance \$20, Liability \$35

FullSize-15 passenger-\$99 a day-200 miles free, .25 a mile-\$16 basic, \$500 deductible

At Large, W6IS

Nothing to report

Program, K1JAW

Show & Tell to have 2 categories, Expert and novice. 2 Books for prizes (1 per category). Raffle will be 50/50

OLD BUSINESS

Bylaw revisions? – KC1V & W6IS. Review any comments received to date? Decision was made to leave the proposed bylaws as is.

Is \$500 enough for the board to make a decision.

Field Day – still need a chairperson? – KK1W volunteered with W1MSW

Boxboro Van Trip. See above Membership comments

Monthly Breakfast Meetings. Ed will talk to the membership and get their opinion, since it is for them.

WB1Z Plaque – criteria? Should it be an operating event instead? Tabled to next meeting
Set BOD meeting dates for the balance of the year. . March 17, April 13, May 19 & June 16.

NEW BUSINESS

KB1MU request to borrow equipment for Titanic Special Event Station..Was OK'd

Liability Policy Renewal Questionnaire.
Change from 102 members to 83, KK1W will submit for quote

Prizes for Show & Tell? 2010 Handbook and Basic antennas book.

Respectively Submitted

Carroll Ed LaCombe KB1NWH



The ARRL New England Convention

at the Holiday Inn in Boxborough, Massachusetts

AUGUST 26-27-28-29, 2010

Every two years during even numbered years the New England Convention Aka Boxboro is held. This has been going on for a long time as many of us know. Now that 2010 is here, it's a Boxboro year!

You need to make time to attend! The sunspot cycle is on the upswing, more DX is coming in; more exciting HF contacts are to be made. To do that you need to listen in on a seminar for the latest techniques, maybe upgrade and buy some new gear, string out those antennas; talk with the big name reps. Boxboro is about 80 minutes from the Springfield area. But if you don't feel like driving, take the HCRA van instead. Let someone else do the driving while you sit back and chat with the others. Enjoy a nice sit down dinner (tbd where) on the way home. It's a fun and exciting trip and not to be missed!

At this time we have the following:

1. KK1W
2. AA1YW
3. W6IS
4. KB1PKJ
5. KC1V
6. W1MSN
7. KB1NWH.

That's about half the van, so it is filling fast so make your reservations now.

When: Saturday, August 28th.

Cost per person: \$30

The fare includes your ticket into the convention,
Chauffeured round trip van transportation.

MY 40M Off Center Fed antenna (OCF) (by Jim k1jaw/qrp)

My favorite antenna is, and has always been, a doublet. That's a dipole, as long as I can fit in my space (67'), feed with window line (65'). Since I do not own a balanced tuner, I use a 1:1 (not a typo) current balun just outside of the house attached to one of my ground post. I then run a 15-foot piece of quality coax (rg213) to my tuner. I can load this antenna on 80M - 6M using my manual tuner with no difficulty. But I do like to experiment, and have given away most of the fancy "new & improved" or "best ever" alternatives that I have tried - Except one - my OCF.

First, it is not a dipole! Dictionary.com's definition of a dipole:

Dipole antenna. An antenna consisting of two equal rods extending in opposite direction from the connection to the lead-in wire

It is also not a Windom, which was a popular antenna in the 20's, fed with a single wire and worked against the ground. And the Carolina Windom has a matching section. But hey, what's in a name? The OCF is fed 33% from one end with coax and a current balun at the antenna. In my case, it is a 40M antenna, fed 22 feet from one end. The current balun selection may change based on height and your specific installation. Mine is a 4:1. (Open air, 40' height)

Now, as for being a compromise antenna, YUP, sure is! Of all of what I consider compromise antennas, this leads the pack! It is not the greatest thing for DX, can only be used for EVEN harmonics, and cannot be used for 15M - no how! - And forget the WARC bands too! The OCF is also prone to common mode current which can cause havoc in the station. (Never experienced by me) So why am I still using it?

I was first introduced to the OCF at a QRP

Field Day about 5 years ago by someone that I respect. I immediately took a dislike to it, and when it was offered to me to take home to try, I politely refused. A few years later, after reading an article about the antenna, I decided to give it a shot. I was sure that it was going to be added to my collection of mis-fit antennas. But two years later, it still hangs and gets used daily. Why? Allow me to describe the antenna first.

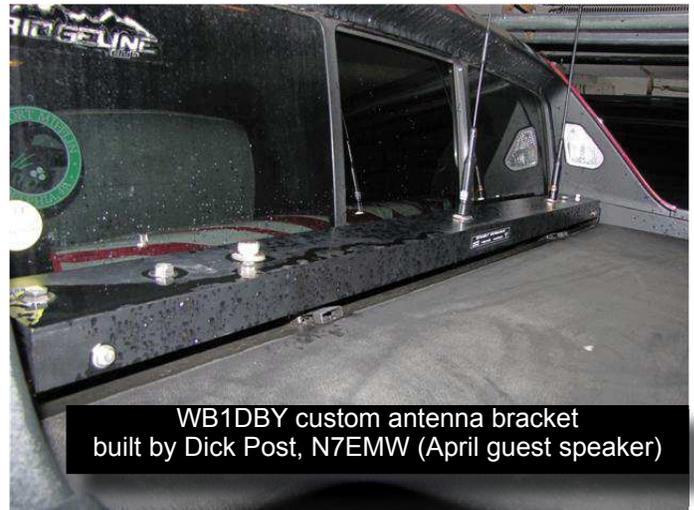
Using the formula of $468/f$, it begins its life as a typical half wave antenna. Instead of cutting it in the center, I cut it 1/3 of the way from one end and inserted a 4:1 current balun. The current balun is used to minimize (not eliminate) the flow of current on the outside of the coaxial cable feeding the antenna. Since I was using #12 insulated wire, the overall length of the antenna ended up being a little shorter than the formula. However, every antenna is site dependant and should be tuned/trimmed after putting the antenna up (and down a few times) and performing measurements.

Uhm! Measurements! The OCF SWR response is flat across the entire band - 40, 20, 10, and 6! FLAT! Well almost... My only other RF device that has that claim is my Cantenna dummy load! So why do I like it? - **28.375 on Monday nights 7:30 pm local!** This antenna outperforms my doublet with all of the vertical installations that are on the air, and it does well with the horizontal antennas too. So I have an antenna that has both vertical and horizontal components and it is great for the net. But honestly, it does not stack up in my best attempts at A/B comparisons with my doublet for DX, and it is not as good as my 10M $\frac{1}{2}$ I vertical for local contacts with other vertical stations. But it is a compromise antenna - right? (say YUP!) I have also read about complaints of a noise issue similar to what most verticals have but I cannot attest to that; I have found

it to be relatively quiet. However, for ease of design, use, and lack of installation problems, it definitely has merit.

As for buying one of these puppies for \$100+, you can easily build one for less than $\frac{1}{2}$ the price; the biggest cost is a quality 4:1 current balun. For me, a rag chewer who likes 40/30/15/10, it has one serious drawback - the lack of 15M. Functionally, at 5 watts, my typical operating range is about 1000 miles, or 200 miles per watt (FL, ND, SD, OK, KS, TX) on 40M. Good propagation often doubles that (AZ, UT, NV, CA, NM), and I do have my glory contacts but they are few and far between. So if you are looking for a no-tuner multi-band antenna, you might consider this one, and you can also be build it for 80M if you have the space. But, if you want a good DX antenna, this one is not for you!

(I will be re-installing my doublet before winter.)
73 Jim, K1JAW (K1JAW@QSL.NET)



WB1DBY custom antenna bracket
built by Dick Post, N7EMW (April guest speaker)

A Little Note on our April Guest Speaker

One of the dilemmas of owning a new vehicle is figuring out how to mount antennas (and rigs). The picture above is the antenna bar imagined by me but custom made by our April guest speaker, Dick Post, N7EMW.

I met Dick a few years ago at the Nutmeg Flea Market held in Wallingford, CT over Columbus weekend. Talking to him gave me ideas for the future. Then some 2 years later, I had a new vehicle (the Honda Ridgeline) and needed a good way to mount my antennas. I had an idea and with the help of my faithful ham friends, actually got my own built bar working. But it wasn't strong and it looked horrible. Not quite the stealth I was looking for. So I contacted Dick and tossed my idea at him. We arranged a meeting and I drove to Southington to discuss what I wanted. A few weeks later I returned and he and I installed the antenna bar. Now 2+ years later it still looks awesome and performs fantastically and my antennas have a good ground and a solid mount. Dick now sells the antenna bar as a kit (BKT-HondaRL-1) on his web site.

Come to the April meeting, Listen to his ideas, see some of his interesting mounts and discuss your ideas with him, Maybe you'll get some ideas on how to better mount YOUR antenna (or your friends) ?



BKT-HondaRL-1

Zero Beat Contributions

Anything of interest is welcome. This is YOUR Newsletter. It's not interesting without YOUR ARTICLE SUBMISSIONS.

Please submit your ideas, articles and more to:
wb1dby@comcast.net



2010 Rookie Roundup Announcement

Sunday, April 18, 2010 — 1800 UTC through 2359 UTC

The Rookie Roundup is designed to help newly licensed amateurs build their operating skills on HF. It is a contest specifically for those new to Amateur Radio, similar to the ARRL Novice Roundup that ran from 1952 until 1995. The Rookie Roundup brings the fun and Elmering of the old Novice Roundup into the 21st century.

The Rookie Roundup will be scored 100% in real time through the www.getscores.org scoring system. There are three ways to participate: by using your favorite logging software with real-time scoring support, by downloading a simple logging program from the www.getscores.org Web site, or by logging your contacts directly into a www.getscores.org Web page. No separate logs are required — it all happens online in real time. Final scores will be available online within an hour of the end of the contest. More information is available on all of these options at www.arrl.org/contests and www.getscores.org. Of course, you can get on the air and make contacts without logging them, but you won't have as much fun!

Three Rookie Roundups will be held each calendar year: SSB in April, RTTY in August, and CW in December.

STAN COLE, N3XP



Kaitlyn Cole, KS3P

April 2010 Rookie Roundup Rules

- ★ **Date:** Sunday, April 18, 2010, 1800 UTC through 2359 UTC
- ★ **Mode:** SSB
- ★ **Bands:** 80, 40, 20, 15, 10 and 6 meters. Listen for contest activity around these frequencies: 3.850, 7.225, 14.240, 21.325, 28.400 and between 50.125 and 50.200 MHz.
- ★ **Exchange:** Call sign of station worked, your call sign, your first name, two digit number of the year first licensed ("check") and state, Canadian province, Mexican call area or "DX."

Who Can Participate

Any ham licensed for 3 years or less qualifies as a Rookie. If you were licensed in 2008, 2009 or 2010, you can compete in the 2010 Rookie Roundup. Non-Rookies may only work Rookies, while Rookies may work everybody. A major part of the success of this contest will be non-Rookies getting on the air and working the Rookies, just as in the Novice Roundup.

Entry Categories

Single Operator, Rookie. 100 W maximum. Spotting assistance or using call sign and frequency alerting systems is allowed, but self-spotting or asking somebody to spot you is not. All Rookies must identify themselves as a rookie. Example: "Kilo Bravo One Quebec Alfa Whiskey, Rookie."

Awards

Certificates will be available for download for all participants. The top five high scores from each US call area, Canadian province and Mexican call area will be recognized on their certificate. No national winners will be recognized.

Go to www.getscores.org for more information on how to participate.

Visit www.arrl.org/contests for complete rules and other information.

The Rookie Roundup — a fun event for *all* amateurs.

From April 2010 QST, page 86 - reprinted with permission

HCRA is 100% behind ARRL in support of the "Rookie Roundup" event coming up on April 18th. See the reprint above from QST and read all about this contest aimed right at you, the new or "rookie" operators.

Support will be in the form of a pool of mentors and/or mentor stations available to anyone that wants to give the roundup a try. Our mentors can talk to you on the telephone or internet and may even be able to visit your shack during the contest and help you through those first contacts. Don't have an HF station yet? That's OK at least three of us are making our stations available for you to use. As of this writing George, KC1V, Ed, KB1NWH and myself are offering our stations for operation. All of us are board members and you can find contact information on the HCRA website at: <http://www.hcra.org/contacts.htm>. If this is something of interest I urge you to get in contact with us early. This contest does not have a 'multi-operator' class so only one person can operate one of these stations. First come, first served - operators are standing by for your call! There will be others filling this role as well. If you're interested in the contest and feel you need some assistance the best avenue for help is the HCRA mailing list. Your question will be viewed

by over one hundred list members. Help and advice is just a few clicks away. If you're not a member of the list find out how to join the fun at: http://www.hcra.org/mailling_list.htm. The list is not only a resource for help; it is the best way to stay up to date on what is happening every month at HCRA. The list is free and is a valuable resource for our members.

One cool thing about the Rookie Roundup is you can log your contacts on line, in real time and see how your friends and competitors are doing. It is only six hours long so even if you operate the entire event you will have time left over to do some yard work and take the family out to dinner afterward! Remember, the good ham is the balanced ham!

We're looking forward to working all the HCRA rookies come April 18th - but we need you, the rookie, in order to make the contest fun for everyone.

'73...
Jim, KK1W

I Had My First CW QSO (and you can too!)

by Matt, W1MSW

I first met Paul (K1PC) at the HCRA auction last November, just two weeks after I received my license in the mail from the FCC. Paul could easily tell that I was a fish out of water and sat down to explain the purpose of the many different auction items as they went up for bid. As a MFJ keyer came up on the block, I mentioned that I was interested in learning Morse code (CW), but had just started the daunting task of learning it from scratch. Paul had taken the 20 wpm code test when it was required for his Extra exam, but had not used CW much recently. We decided that I would study until I felt comfortable having a slow QSO and he would brush up on his CW skills during that time. Four months later, we setup our first scheduled contact (sked) and I had my first CW QSO. It's hard to describe how you feel during your first CW QSO, but put simply, it was exciting and nerve-racking all wrapped up into one fantastic experience. Although I made plenty of mistakes, it encouraged me to keep practicing and improve my speed and accuracy. What follows are some suggestions I followed to get to this point and I hope those of you who are also interested in learning CW find them useful.

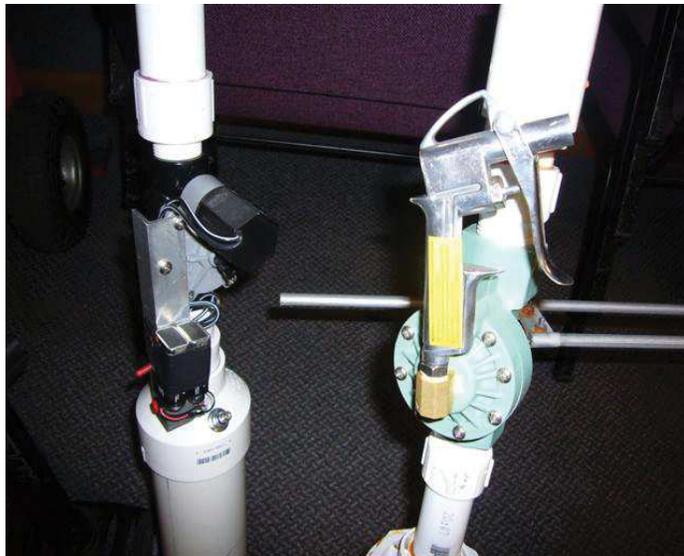
First, it's important to remember that learning CW is not an impossible task. Anyone can do it, but they have to be willing to invest the time to practice copying. The method that most people recommend is two short practice sessions a day, 15 minutes each. Practicing longer than that in the beginning can quickly become frustrating.

Later on, as copying improves, it becomes easier to add time onto practice sessions. It is also important to not give up if a session or two is missed and to jump right back in where the last session left off. It might be a little rough at first to get back on track, but it comes back quickly.

Second, I recommend using one of the many CW training software resources in place of audiotapes or CDs. Tapes have worked well for many over the years, but the problem is that these silly human brains of ours begin to memorize the tapes. By using software that generates random characters, our minds are forced to pay attention at all times. Another important aspect of these software-based trainers is that they easily allow the use of the Farnsworth and Koch methods of learning CW. The Farnsworth method provides the ability to select one speed for the characters and another speed for the space between the characters. For example, the characters can be learned at 20 wpm with 15 wpm worth of space in between, allowing the brain more time to process the sound. This makes increasing copy speed later on much easier. The Koch method is a system of learning characters by starting off with only a couple and adding characters one at a time until they are all memorized.

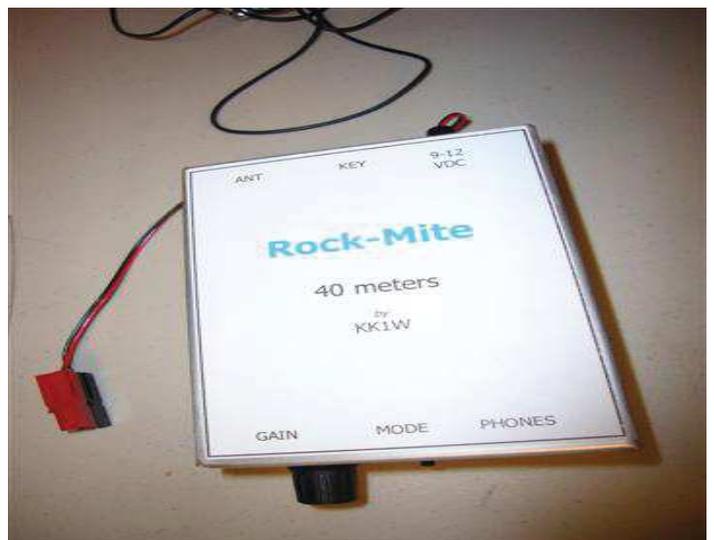
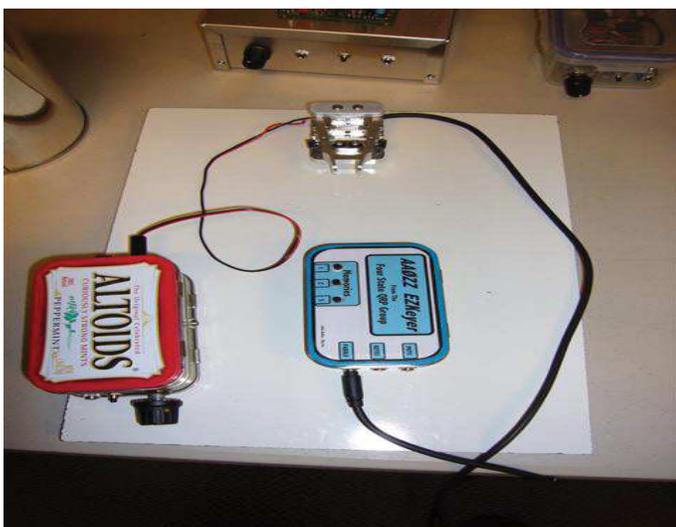
There are many software programs out there, but I'm a big fan of those that are free. One browser-based version that will work on any computer with Internet access can be found at <http://www.lcwo.net>. Account setup is quick and painless

Show and Tell 2010

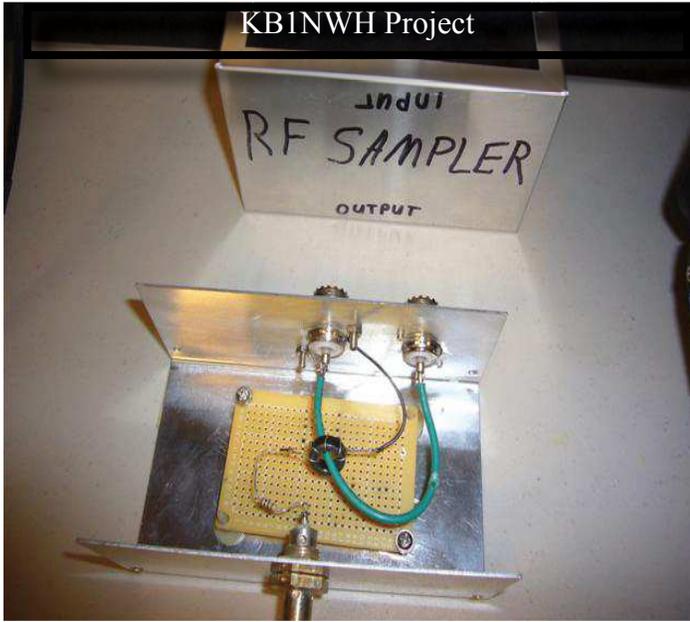


Top left and left middle: Antenna launchers designed by K1VOI and W15Q

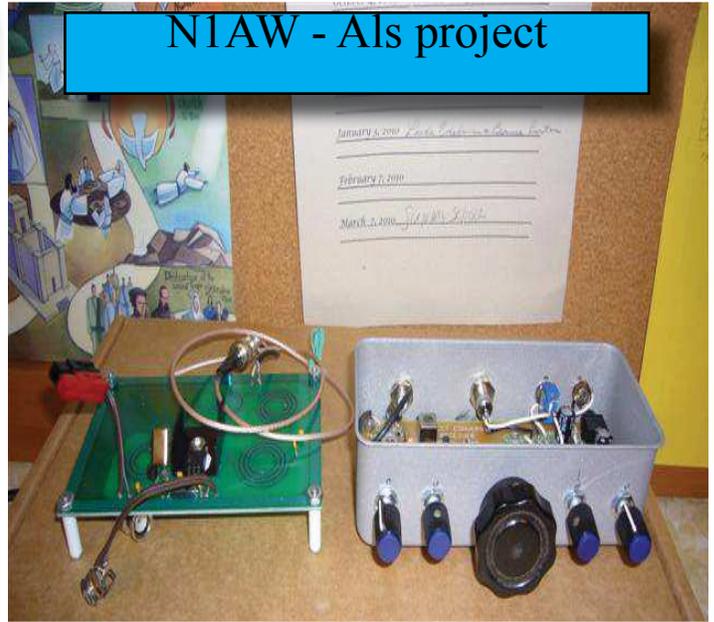
Bottom left, above and below: return of the Rock Mites



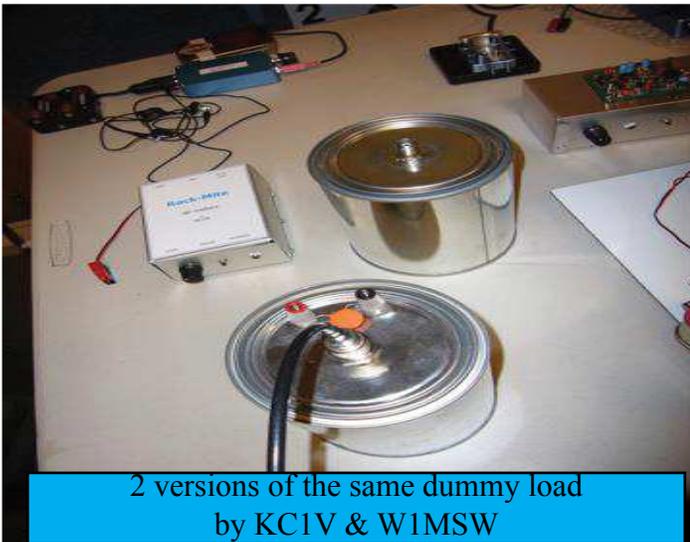
KB1NWH Project



N1AW - Als project



2 versions of the same dummy load by KC1V & W1MSW



John - K1VOI discusses his antenna launcher



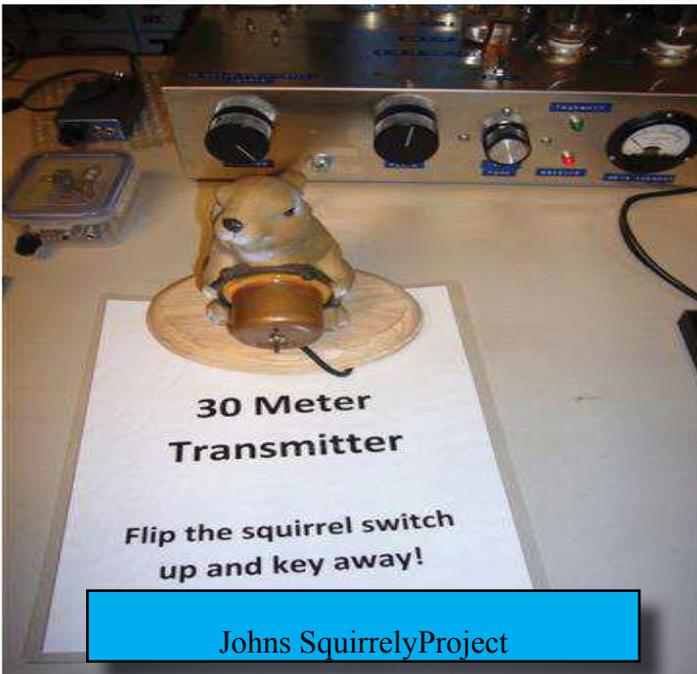
Bob - W1AQ discusses his antenna launcher design



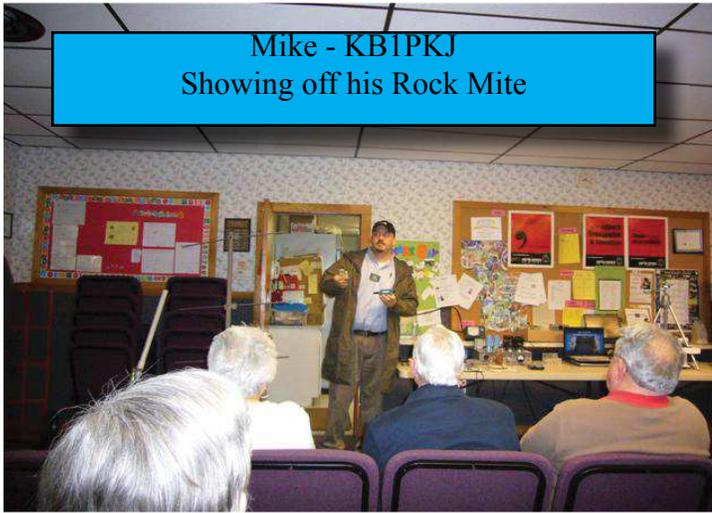
30 Meter Transmitter

Flip the squirrel switch up and key away!

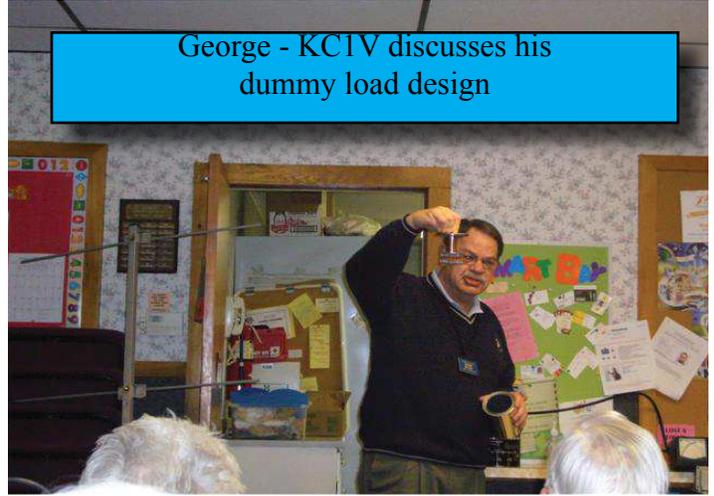
Johns SquirrelyProject



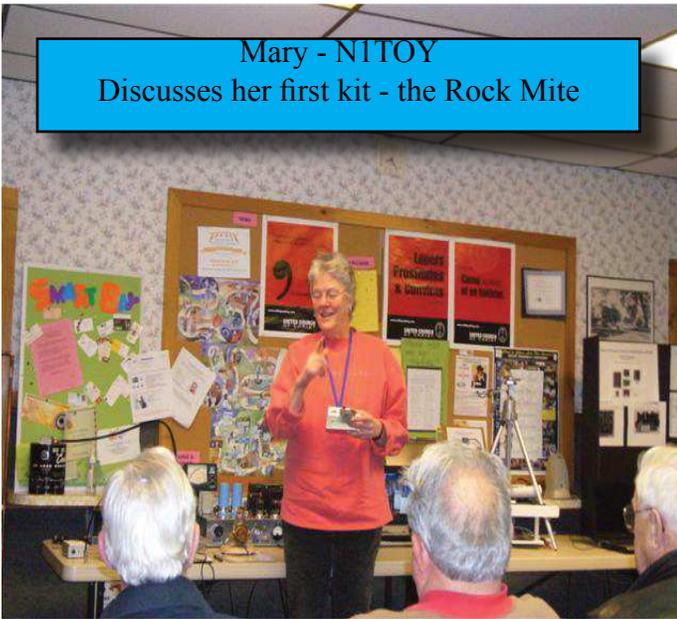
Mike - KB1PKJ
Showing off his Rock Mite



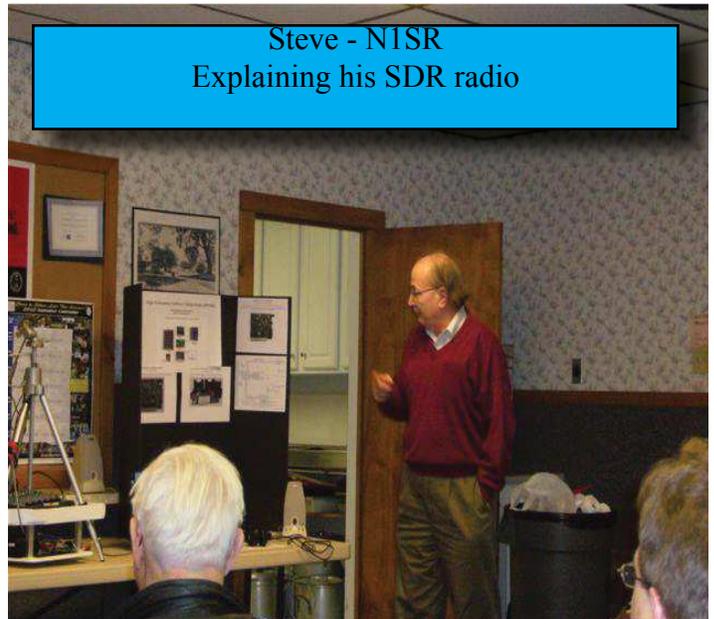
George - KC1V discusses his
dummy load design



Mary - N1TOY
Discusses her first kit - the Rock Mite



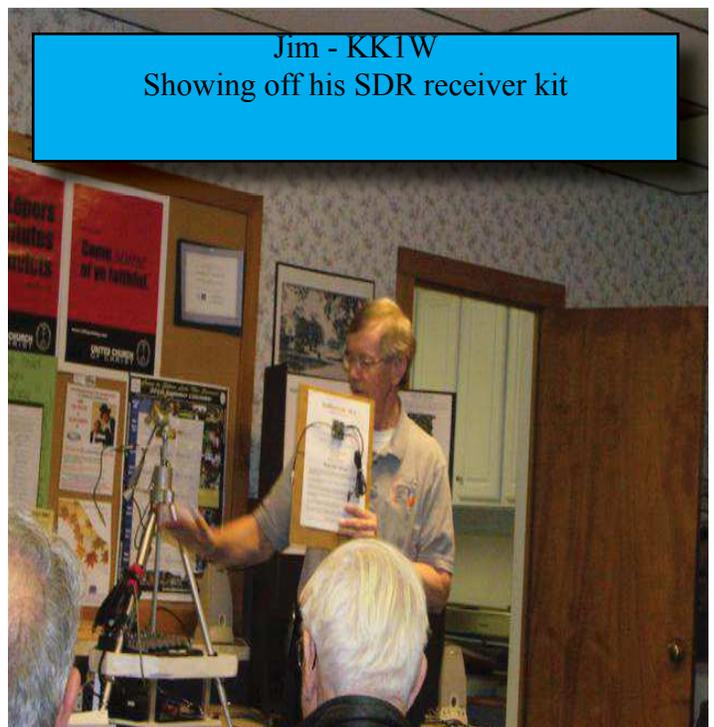
Steve - N1SR
Explaining his SDR radio



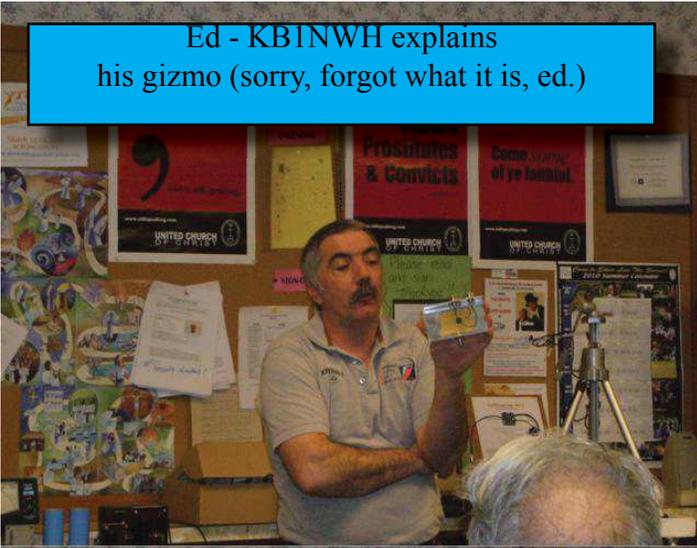
The Rock Mite was also
Matt - W1MSW's first kit



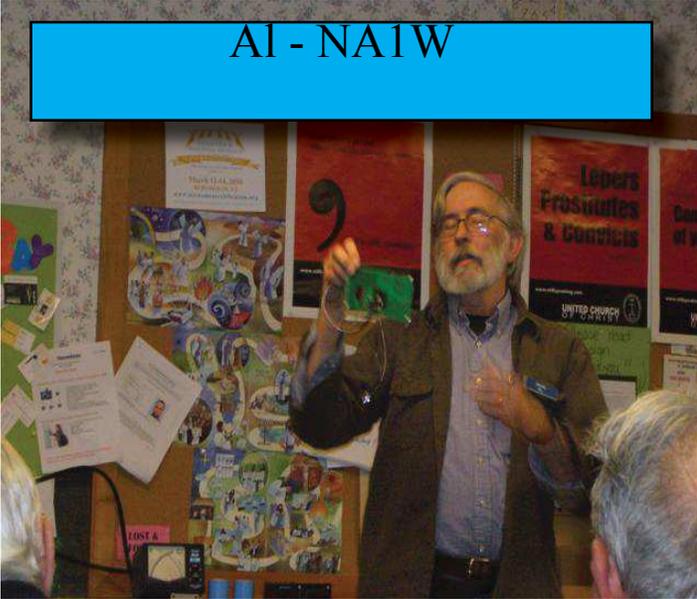
Jim - KK1W
Showing off his SDR receiver kit



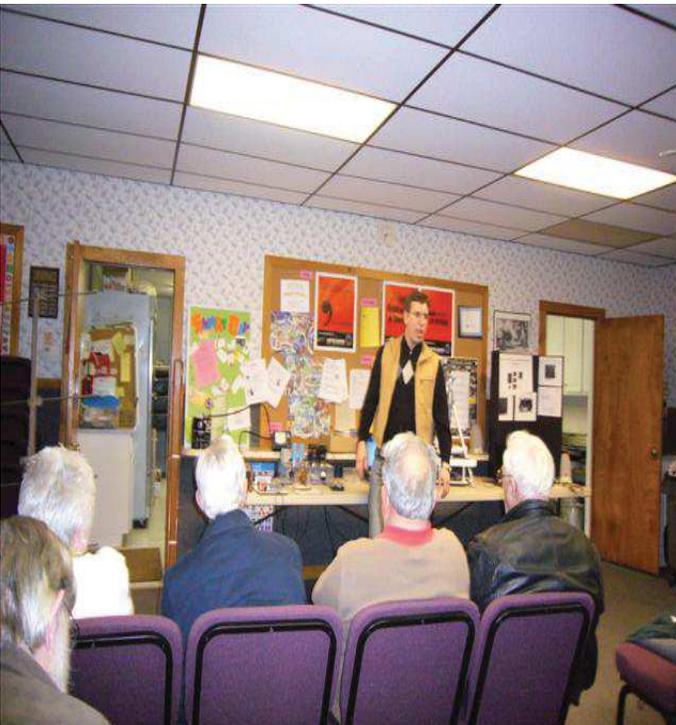
Ed - KB1NWH explains his gizmo (sorry, forgot what it is, ed.)



AI - NA1W



AI - KB1XG's Winning audio project



I Had My First CW QSO (and you can too!)

continued from prior page

and it allows you to track your progress as you work through the lessons. Another popular training software was written by G4FON for the PC and can be found at <http://www.g4fon.net>. Not only is this software useful for beginners, but also for those who already know CW and want to improve their copying skills. Once you become more proficient at copying the code, the software allows you to add simulated QRM, QSB, chirps, and change the noise levels and signal strength. There are also apps out there for smart phones that do cost a little, but can be a great way to burn 15 minutes if you're stuck somewhere without a computer. Just make sure you don't look too crazy listening to your headphones while copying down a bunch of random characters! If you have an HF rig you can also tune into W1AW's code practice transmissions, which are scheduled at different times of the day, at different speeds and on different bands. The schedule and the transmissions themselves can be downloaded from the ARRL website.

Finally, probably the best tip given to me while learning CW is to avoid visualizing the dits and dahs as dots and dashes. Instead, listen to the sound and when you hear "di-dah" (the sound the barcode reader at Home Depot makes) think "A". Visualizing the sounds as a combination of dots and dashes only adds one more step between hearing the sound and copying it down and will greatly reduce your copying speed while adding to your frustration.

How long will it take? That obviously depends on the person, but I took the very leisurely route and felt confident enough to get on the air after 4 months. I have no doubt that others could be ready much sooner than that, or maybe take longer. Just make sure that you don't get burned out by going too fast or spending too much time copying. I also encourage you to get on the air as soon as you have learned all or most of the characters. Nothing improves your confidence and speeds up your copying more than a real QSO! When you're ready to make your first contact, send a note to the club mailing list and setup a sked with a club member. As I found from working with Paul, it takes some of the pressure off when you know the person you're sending and receiving with. Good luck and please see the links below for more information about learning CW.

Dah-dah-di-di-dit Di-di-di-dah-dah,

Matt / W1MSW

A Beginner's Guide to Making CW Contacts
By Jack Wagoner WB8FSV
<http://www.netwalk.com/~fsv/CWguide.htm>

So You Want to Learn Morse Code By David G. Finley, N1IRZ
<http://www.qsl.net/n1irz/finley.morse.html>

W1AW Code Practice Transmissions:
<http://www.arrl.org/w1aw.html>

Meeting Location:
Feeding Hills
Congregational Church
21 North Westfield Street
Feeding Hills, MA 01030



Next Meeting:
Guest Speaker:
Dick Post, N7EMW
Friday, April 3, 2010
7:30pm

Are you ready to Fox Hunt?

Jim, K1JAW has passed over the reigns to the HCRA fox box to me. It needs a little work and then it'll be ready to skunk you hunters!

Are you interested in a "on foot" fox hunt? We had a few in past years and are going to start them up again if there is interest. BUT, I need to hear from you. So please email me at: wb1dby@comcast.net if you are interested in participating. How about you Venture Crew DX'ers? Are you up to the challenge?



The Hampden County Radio Association
P.O Box 562
Agawam, MA 01001



PLEASE HAND CANCEL