

The KEY

The Newsletter of the Contoocook Valley Radio Club

<http://www.qsl.net/k1bke>

Volume 17, Number 2

December, 2005

A Word from the President

John Moore - N1FOJ

Hello All , I hope you had a Great Summer and are now looking forward to Ham Radio in the Fall and Winter ! HF Contest Season is rapidly coming upon us , with the CQWW Contest this month and the ARRL November Sweepstakes next month. The CVRC has quite a few events coming up in the near future and we would love to see everybody in attendance. 1) A Reminder to All : Nominations for Club Officers are now Open and we will be taking them right up to the December Meeting . We need to get your input to make the elections fair .Please , If You would like to serve , Feel free to nominate yourself ! Scott Clay will be stepping down as Treasurer at the end of the year , so we will definitely need to fill his position. Thanks Scott for all your Hard Work keeping our finances straight ! Call me or any other Club officer to make a Nomination before the next meeting. 2) The CVRC Christmas Party and December Meeting will be held at the Cat & Fiddle Restaurant, on Manchester St.in Concord , NH .. It will be on Saturday , December 10th. Plan to arrive around 6 for early unwinding with the Major Festivities starting at 7 PM. We will again be having the Yankee Swap of Presents. Dinner will be ordered from the Menu . If you can let us know that you are coming at the November meeting , it would be appreciated , as we need to plan the seating. Also , Remember that the Christmas Party is where the Election of Officers will be Held. Please Plan to Attend as We need your Participation ! 3) Speaking of Participation , I want to take this Chance to say “ Thank You ! “ to Don - N1ZIH for his operation of the CVRC Tent at the recently past Hosstraders Hamfest. Barring Myself , NOBODY (That's Right - Nobody !) showed up to help out with selling at the Club Tables. Don pretty much carried the load himself as I was also selling ! Wake Up Everyone - We need your Help with these Events and Money Makers for the Club ! We Cannot Continue to Do It Alone. Even if You can only Help Out for an Hour

here and there , We need YOU! Please Think about giving some of your Time to help make things happen. I know , There are Many of Us that already do give Generously , But we need Those of You standing on the Sidelines to Pitch In . You All Know which Group You are In , Now Let's Make it One Big Group Pulling Together for the CVRC ! 73 and see you at the Meetings. Best Regards,

73, John - N1FOJ

CVRC Flea Market

Jim McElroy - NS1E

The 2006 CVRC Hamfest will be held on Sunday, March 19, 2006 at the Henniker Community School. Please mark this date on your calendar and plan to attend. Your volunteer efforts will continue to make this event the primary fundraiser for the club.

The advertising will be placed soon, and planning for the program is in progress. Since the presentations of recent years have not been well-attended, we would like to hear your preferences for program topics and formats. Your comments can be emailed to Jim McElroy, NS1E [ns1e \(at\) arrl.net](mailto:ns1e@arrl.net)

73 , Jim - NS1E.

NS1E's Excellent Antenna Adventures

Jim McElroy - NS1E

Since I don't put decameters of aluminum in the sky as do un-named members of this distinguished group, I have to arrange #14 wire in various configurations to work DX with my 2 Watts. (More another time about folks who make their own ionosphere and light their yards at night from the corona from the ends of the beam elements.)

Up until recently, I have used mostly hori-

zontal antennas. Horizontal antennas have high efficiency, and horizontally polarized waves have lower reflection loss than the vertically polarized variety. The former advantage is due to the distance from potentially lossy ground, and the latter arises from the physics of reflection of electromagnetic waves.

OK, the horizontal antenna is more efficient, but any antenna that I can put up is close to ground when the height is measured in wavelengths. So where does all this efficiently transferred energy go? Straight up! And where does the local QRM that blocks out the DX just when they say "NS1? agn agn?" come from? From the million hams in the flatlands whose signals go straight up and back down into the front end of my three-IC receiver!

The scales fell from my eyes when I visited 8P6BX in Barbados earlier this year. He was using a delta loop in the vertical plane, vertex up and fed in a lower corner, resulting in vertical polarization. It was sort of floppy, the mast having been bent in a recent hurricane. With this and 4 Watts, I was causing pileups in Europe in the evenings. And the powerful Brazilians were not wiping out the bands. Now, it helps that we were 400 ft above sea level and had an unobstructed view of the sea. But, the results did point out that an antenna that is less efficient, but puts the energy where you want it, can be useful.

Verticals have three main loss mechanisms. Verticals with a ground return lose energy in the ground system. I've already mentioned the increased loss in reflections from the ground. The third loss is in near-by trees and other vegetation. I can't change the laws of physics, and my continued residence in Henniker would be endangered if I cut down the blue spruce in the backyard. But, I was determined to avoid a ground system with the associated radials and losses.

The antenna that I chose to do this was the half-square for 40 meters. This consists of two vertical quarter-wave wires connected by a horizontal half-wave wire. It looks like an upside-down "U". This antenna avoids the ground loss problem by providing the feed point up in the air. The currents in the horizontal portion are up high, and the corresponding losses are no more than for a

horizontal antenna. It is fed at one of the intersections of the horizontal and vertical wires with an impedance near 50 Ohms. Its pattern has two lobes, and there is little sensitivity to signals coming in from high angles.

In my case, I couldn't get up high enough to have a full quarter wave, so I shortened the vertical wires and put capacity hats at the end that were adjusted to resonance. I used CATV RG-6A cable to feed it, and tuned it for the low end of 40 meters.

The predicted pattern of the antenna and its performance seem to match pretty well. With 2 Watts from my Norcal 40, I can get into Europe and the Ukraine pretty consistently; Latin America and the Caribbean are consistent as well. I do pretty well in the US; I haven't really pushed it, but I do ok into the mid-west and southern US. It is a reasonably quiet antenna, and it seems that I have less trouble with QRM than with the horizontal dipole.

The predicted efficiency of the antenna is about 27 percent, and the blue spruce and other nearby trees probably bring that down to around 10 percent. However, that seems to be enough to give good results.

The moral of the story is that there are many antennas available to us that can meet specific needs and that can be put up for little money. Even old guys like me can learn and try new things out by stringing the odd bits of wire around the yard. And it is fun to get such good results from 140 feet of house wire and 70 feet of surplus cable. Try it!

73 de Jim McElroy, NS1E/8P9KL

ARRL Toy Drive

John Moore - N1FOJ

The ARRL and The Salvation Army are partnering this year to provide Toys for the Children that have Lost Everything in the Hurricanes that have Battered our Southern Coast. They are asking that Hams Nationwide purchase and send New Toys for these Children. I am sure that All Club Members would agree with me that this seems to be a Worthy Cause to involve ourselves

in ! I am asking that everyone please donate a Toy to Help these Children Out . Toys of All Kinds and Age Groups are needed. Put your QSL Card inside the Box or Package or Tape it to the outside and Bring it to the November Meeting , and we will see that it gets shipped. If you cannot make the Meeting , Please send the Toy to : ARRL Toy Drive/The Salvation Army , 1775 Moriah Woods Blvd. - Suite 12 , Memphis , TN. , 38117-7125. Here's your chance to make an unfortunate Young Person's Christmas Happier and Show what Great People Ham Radio Operators really are ! Best Regards to All , John - N1FOJ

CVRC Dues

Hello All , Just a Friendly Reminder that another year has Flown By and It's almost that Time Again ! I'm talking about Club Dues for the 2006 year coming due. Please remember to bring your payment to the meetings or send it to our Treasurer via the Club Address : C.V.R.C. , P.O Box 88 , Henniker , NH. , 03242-0088. See You at the Christmas Party on Dec. 10th.. Best Regards , John - N1FOJ

Antenna Woes

As everyone knows , I like to work HF DX ! This was going to be the year that I finally got my Beam Antennas situated on my Tower so that I could work not only HF DX but 2 and 6 meter DX also. With this in mind , I purchased a Directive Systems 5 element Yagi for 6 Meters , a Used Cushcraft 15 element 2 meter Yagi , and Finally , A Cushcraft A3S Triband Yagi for 10,15,and 20 Meters. This was the first time that I had ever bought a New Tribander ! Plans were made and early in September we held the Antenna Party at my QTH . Attendees included my YL Sara , AF1T , W1MKY , WB1ASC , NS1E , NS1O . We had a Barbeque Cook-Out along with the Raising and everyone had a Great Time. Except Me ! The 2 and 6 Meter Beams went together and up just Fine . Now comes the Brand New Tribander . It was assembled and then Dale checked it with the MFJ 259B Analyzer. UH OH ! Something is Radically Wrong with the Ten Meter readings ! We tried

moving Traps and Adjusting Element lengths with No Better Results. OK , Guess the Tribander is not going in the air today. I started a correspondence with Cushcraft regarding the problem. Dale and I had figured that one of the traps was bad and this was causing the problem.. Cushcraft agreed to replace the defective trap under warranty. They sent me another and I put it on the antenna and ran the tests again. No Difference ! Now I'm really Pulling my Hair Out and Worrying about Running Out of Time to get it up this year ! Finally I took all the Ten meter traps over to Dales QTH for more precise measurement. On his Trap measuring setup , the lowest still measured very high in the Ten meter Band and All were near the FM Frequencies, around 29.500 MHz and up! Now I've got Real Big Problems ! Six Traps that I can't use and a Seventh that is just as bad . At this point , I probably should have Boxed the Antenna up and taken it back to HRO for a Refund , but I'm stubborn and figured I'd give Cushcraft one more chance . I took all the traps and went down to Cushcraft in Manchester. I went in to the Reception area and told the lady behind the counter my woes. She was quite Helpfull and soon had sent me across the street to meet Ed Hammond - WN1I at another part of the facility. Ed came outside to greet me , took me in and took all the Traps in for measurement , giving me a receipt. This was on a Tuesday and He told me to contact him on Thursday to see how things were going. Had quite a Good Eyeball QSO with Ed while I was there , too. Thursday came and I placed the call to his voice mail in the morning. He contacted me early in the afternoon and Told me that he had 7 New Traps waiting for me at his office. Of Course , I practically flew over to Cushcraft to pick these up ! Took these over to Dales and tested them with Great Results - Almost like they had been Hand Picked ! Now the Antenna has been Re-Assembled and is ready for Final Testing (I Sure Hope So!) and installation on my Tower. I would like to say "Thank You" to Dale - AF1T for all his help with the measurements and a "Very Special Thanks" to Ed Hammond-WN1I ,of Cushcraft, for his Excellent Help in getting me the New Traps ! There are still people out there who care ! 73 , John - N1FOJ.

Programs

By Dale Clement, AF1T

* Saturday, December 10, 6 PM: ANNUAL CHRISTMAS PARTY at the Cat 'n' Fiddle Restaurant (188 Manchester St., Concord N. H.). Family and friends are welcome. Order from the menu. Election of Officers for 2006 will be followed by our traditional "Yankee Gift Swap". Bring a wrapped but unlabeled gift. This is always lots of fun.

* Tuesday, January 10, 2006: Hopkinton Library, Contoocook, N.H. Program to be determined- we need you input!

* Tues, February 14: Same as January!

* Sunday, March 19: Annual CVRC HAMFEST, at the Henniker Community School Cafetorium. Here is one of our most fun and successful events, featuring a Flea Market, Door Prizes, Refreshments, Special Programs, and VE Exams. Don't miss this one!

Other Events:

Several CVRC Members operate the following, and would appreciate contacts from you:

* ARRL PHONE SWEEPSTAKES, Nov. 19 (4 PM) to Nov. 20 (11 PM), 2005 160- thru 10-meters. Look for W1MKY, who will be trying for a Clean Sweep (All 80 ARRL Sections)(Missed NWT). Most activity will probably take place on 40- and 20-meters.

* ARRL VHF SWEEPSTAKES, Jan. 21 (2 PM) to Jan. 22 (11 PM). Look for AA1YN, AC1J, AF1T, KC1NCR, N1FOJ, N1JHJ, NS1O, and WA1VKO on 50- and 144-MHz SSB, or put out a call on 144.55 FM Simplex.

Your input is NEEDED!

Missed the meeting? Want to know what was discussed in your absence? The club is trying to maintain a good collection of the meeting minutes online. Goto www.qsl.net/k1bke/minutes.html and see what you missed. We try to get the minutes online within two weeks of the last meeting.

CVRC Christmas Dinner

I know it has been mentioned by our President, the Christmas Dinner will be Saturday, Dec. 10th with happy hour at 6PM and the dinner starts at 7PM. There will be a short meeting after dinner to elect new officers. After the meeting there will be a Yankee Swap so bring a gift if you wish to participate. Last year it was loads of fun for all and the dinner was a great success so don't miss it. For those who plan well in advance, I will make reservations for next year on the 9th of December.

Lee - AA1YN

Concord fire Department fire prevention day

On Saturday, October 1st the CVRC took part in the annual fire prevention day activities sponsored by the Concord Fire Department and taking place at their training facility on Loudon Road. We demonstrated 10 gig operations with equipment supplied by John Moore N1FOJ and Dale Clement AF1T. Several people dropped by and had the chance to operate this equipment. Children were especially delighted to tell Dale their names over the radio and have him send it back



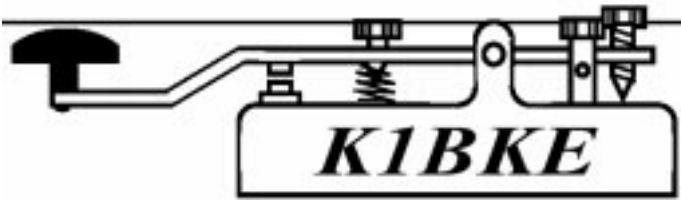
to them in CW. We also handed out several membership applications and had five people sign up for a possible ham class in early 2006. The event lasted from 10:00 am to 2:00 pm and included many displays of area fire department apparatus. The Manchester fire department exhibited their rappelling skills to a large crowd of visitors. Other exhibits included displays by the Concord Police Department and a rollover simulator that showed what happens to someone in the event of rollover accident without seatbelts.

Thanks to Lt. Ken Kiehl of the Concord Fire Department fire prevention bureau for inviting us. Thanks also go out to Rob Farley K1CFI and the Pembroke Fire department for supplying tables. Thanks also to John Moore N1FOJ, Russ Richards KB1JCX, Dale Clement AF1T, Micki Bergh K1MKI and Steve Jones N1JHJ for assist-

ing me with this event. We look forward to being invited next year and hope to have as successful an event as this years.

Donald Curtis N1ZIH





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CVRC CLUB CALL: K1BKE

CVRC operates:

K1BKE/Rptr 146.295/146.895

K1BKE:CENTNH 145.57 Packet Node

CVRC OFFICERS

President	N1FOJ, John Moore	746-4817
Vice President	AF1T, Dale Clement	428-3840
Treasurer	N1ZGO, Scott Clay	
Secretary	Don Curtis, N1ZIH	927-6012
Trustee of club call	W1JS, Jack Sheehy	529-5635
K1BKE Repeater trustee		
Packet node trustee	K1JY, Lindsay Collins	495-3983

ACTIVITIES & COMMITTEES

Flea Market	JimMcElroy, NS1E	428-7436
Programs	Dale Clement, AF1T	428-3840
V.E. Sessions	Al Bardwell, NS1O	228-1407
License Classes	Need Volunteer	
Field Day	Jerry Blanchard, K1BBQ	227-0541
Outgoing QSLs	John Moore, N1FOJ	746-4817
Historian	Louise French, K1LAS	428-7253
Membership	Scott Clay, N1ZGO	746-4543

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CVRC meetings are held on the second Tuesday of the month at the Hopkinton Town Library in Contoocook, NH. Members and nonmembers alike are welcomed. Talk-in is on the K1BKE 146.895 600 kHz (100 Hz PL) repeater.

Contoocook Valley Radio Club

P.O. Box 88

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