

The KEY

The Newsletter of the Contoocook Valley Radio Club

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

Volume 16, Number 1

Feb, 2004

Election of Officers

At the Christmas Party officers for the 2004 calendar year were elected. A number of members asked why the election was held in December and the reply is it was written in the clubs constitution nominations will be held in November and the election will be held during the club meeting in December. Here are the results:

President

John Moore - N1FOJ

Vice President

Dale Clement - AF1T

Treasurer:

Scott Clay - N1ZGO

Secretary

Don Curtis - N1ZIH

We congratulate our new officers and thank them for taking on the responsibility. We also offer our thanks for a job well done to our past officers Shawn, Al, John, and Don.

Programs

By Dale Clement, AF1T

As your Program Director for 2004, I look forward to a variety of interesting programs and events that will entice more members to participate in our club. Please let me know what you're interested in. Mail the enclosed Program Suggestion Form, or bring it to a meeting. The more specific your suggestions and information, the more useful they will be. Names and phone numbers of potential presenters will be very helpful. Remember that this is your club, and that we share a common interest in Ham Radio, but that covers a lot of territory. Part of the Ham Spirit is to learn and share knowledge about technology and communications, and pass our enjoyment along to others.

I hope you enjoyed January's program, a well produced film about the ZL9CI Cambell Island DX-Pedition. This was loaned by Chip Taylor, W1AIM, whose SSB contact with ZL9CI appeared in the film.

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The KEY is published quarterly. The deadline for articles and submissions is the fourth Tuesday (coinciding with the usual business meeting schedule) of the preceding month.

A Word from the President

John Moore - N1FOJ

Hello to all CVRC members. I would like to thank all those who voted in our election. It is an honor to serve you during the upcoming year. Congratulations to my fellow officers are also due. Please welcome aboard Dale - AF1T as our Vice President, Scott - N1ZGO as our Treasurer, and Don - N1ZIH as our Secretary. I know that they will do their best to provide you with a Great Club!

I want to tell you that the future has some exciting things happening. I invite you all to attend our regular meetings

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Message from N1FOJ - cont.

and see for yourselves. We have many interesting talks planned for this year's meetings, starting with QRP Operation by Jim McElroy in February. In March, we have the club flea market coming. The club is working towards upgrading the K1BKE Repeater and we are actively soliciting donations. Please be sure to read Lindsay's article on page 3. All contributions for the repeater will be held separately. Please plan to attend the monthly meetings and support the club.

73, John - N1FOJ

Programs - cont.

February's program QRP was presented by Jim - NS1E. Jim's presentation was very informative and interesting. So far, we have planned the following programs:

March 9 (7:30PM at Hopkinton Library)

"See the Signal that you Hear"

John Seney, WD1V, will demonstrate the latest Digital Oscilloscope Technology. Learn how to measure some of those elusive signals.

March 28 (Sunday, 7AM to 2PM at Henniker Community School)

This is our Annual C.V.R.C. Flea Market, See the writeup on page 4.

April 13 (7:30 PM Bedford, NH)

Trek down to the U.S. National Marconi Museum in Bedford, NH for a birthday celebration with Ray Minichiello, W1BC. We did this last year and everyone seemed to have a great time.

May 11 (7:30PM at Hopkinton Library).

"Soldering Symposium"

Learn the art of professional soldering with Russell Richards, KB1JCX, a Certified Soldering Instructor.

June 8 (7:30 P.M. at Hopkinton Library)

"Field Day Extravaganza", with Mark Pride, K1RX.

Learn how the National Champions at Port City ARC do Field Day!

Dale is trying to get a better idea on the types of programs you would like to see at our meetings. Please take the time to fill out the enclosed Programs form and return it to Dale, AF1T

A Message from your Editor Lee Scott, AA1YN

I would like to thank those who submitted articles to help make this publication possible. I will be taking your articles either written by hand or preferably emailed to me - aa1yn@aa1yn.com then editing them into the newsletter. I will then email it to Don Curtis N1ZIH for printing and mailing.

Now, here's the PLEA - if you can receive notification of publication via email and then download the newsletter, let us know. This saves the club the expense of printing the newsletter and the mailing.

We desperately need articles to fill up the publication. If for some reason I get more articles than I need, I'll publish them in the next Key. Submission deadline is by the business meeting prior to publishing.

2004 VHF & UP CALENDAR by Dale, AF1T

(By no means complete. Call AF1T for information)

5 APR.-144-MHz SPRINT, 7-11 PM E.S.T.

13 APR.-222MHz SPRINT, 7-11 PM E.S.T.

16-18 APR.-EASTERN VHF/UHF CONFERENCE, Enfield, Conn.

21 APR.-432MHz SPRINT, 7-11PM E.S.T.

30 APR.-1 MAY-HOSS-TRADERS FLEA MARKET, Contoocook, N.H.

1 MAY-MICROWAVE SPRINT, 6AM - 1PM E.S.T.

1-2 MAY-2 GHz & UP WORLD-WIDE CLUB CONTEST

8-9 MAY-50MHz SPRINT, 2300-0300 U.T.C.

14-16 MAY-DAYTON HAM VENTION, Dayton, Ohio

12-14 JUNE-A.R.R.L. JUNE VHF QSO PARTY

17-18 JULY- CQ WORLD-WIDE VHF CONTEST

22-25 JULY- CENTRAL STATES VHF CONFERENCE, Toronto, Canada

6-8 AUGUST- INTERNATIONAL E.M.E. CONFERENCE, Ewing, N.J.

7-8 AUGUST- A.R.R.L. UHF CONTEST

21-22 AUGUST-A.R.R.L. 10 GHz & UP CONTEST

11-12 SEPT.- A.R.R.L. SEPT. VHF QSO PARTY

18-19 SEPT.- A.R.R.L. 10GHZ & UP CONTEST

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.

K1BKE Repeater Replacement Thoughts

Lindsay Collins - K1JY

A memo was written in January 2002, regarding the equipment used for the K1BKE repeater and the status of it. (Ed. Note: If you wish a copy of this memo, please contact Lindsay or myself.) Since this was written, we experienced a prolonged period of time where the repeater was subject to reception interference heard as noise, crackles, and an echo-type feedback. This past summer, we eliminated most of the problems by replacing the antenna, antenna mounting hardware, a feed-line connector, and the duplexer harness, and by retuning the duplexer and transmitter. The remaining intermittent noise problem is caused by RF interference noise on the tower, and is not something that we have been able to locate, or likely is directly within our control. Since the work has been done and the antenna relocated to the opposite side of the tower the interference has been quite tolerable only showing up on some rainy days. The repeater appears to be performing admirably.

During the course of this work it was noted that most of the repeater is now 15 years old (excepting power supply, antenna, and 10-year old controller). Since work has been done on the duplexer, there seems to be little concern for the reliability of the power supply, controller, and duplexer. There has been some discussion about replacing the receiver and transmitter combination. Receiver sensitivity has been seen to drift apparently caused by intermittent trimmer capacitors. The transmitter power seems to wander, and has a tendency to generate spurious noise that is tuning dependent. For a while we used as a transmitter a Motorola Syntor provided by Chris Sieg until the final transistors failed.

The question has been asked as to what replacement costs would be. This discussion will focus on the receiver and transmitter.

There are many choices. One can buy either new equipment or used equipment. For both new and used, there is a choice of heavy-duty commercial equipment or lighter duty commercial and amateur equipment. For all grades of equipment, there generally is the choice of individual components or a manufactured repeater system.

Examples of makes of heavy-duty commercial equipment would be Motorola and General Electric. Examples of makes of lighter duty commercial equipment would be Vertex and Kenwood. Examples of amateur grade equipment

would be the Melco transmitter and Spectrum Communications currently in use at K1BKE; these were purchased as individual units and integrated into a repeater.

Some folks swear by either old GE Mastr II or Exec, or Motorola Micors (a discussion of which, inevitably becomes a Chevy vs. Ford-type argument). The old GE and Motorola units are rugged, generally reliable, and have very selective although not overly sensitive receivers. These units are typically 20 years old now. (In my opinion, the newer Motorola Syntor is not suitable and it cannot be duplexed.) Other folks have good luck with Kenwood, Vertex, and Spectrum Communications repeaters and components. Typically these receivers are quite sensitive, but occasionally suffer from overload by nearby transmitters.

When considering any equipment that requires conversion or integration, factors to consider are the cost of crystals, the technician's time and ability to convert, assemble, and maintain, and the availability of test equipment. Generally a manufactured repeater will require less time and test equipment to implement and maintain.

General costs:

Used GE or Motorola mobile suitable for conversion	- 300.00
Used Vertex or Kenwood repeater	- 500.00
New Melco or Spectrum components for integration	- 900.00
New Vertex or Kenwood repeater	- 1300.00
New GE or Motorola repeater	- thousands

Most of my UHF and VHF repeaters are converted GE Mastr II mobiles, with a Motorola Micro, an Icom, and an Aerotron for variety.

My recommendation to the club is to work towards an upgrade. Considering the ages and work involved, I would not promote a converted GE or Motorola. I would consider either a used (depending on make and model) or new Vertex or Kenwood repeater. Of course the availability and cost of any used repeater cannot be predicted in advance. I will look for what I would consider a suitable unit and will let the Club know if I find something.

CVRC Flea Market – Sunday, March 28th, 2004

Join us at the Henniker Middle School for the annual CVRC Flea Market. Doors open at 8 am for general public, 7 am for sellers, and close at 2 pm. Grand prize drawing is at 1 pm.

To reserve table space or to volunteer to help, call Jim McElroy NS1E at 428-7436.

A VE session will be conducted. Call Al Bardwell, NS1O at 603-228-1407 to pre-register or to volunteer as a VE. Registration starts at 9 am and the test session begins at 9:30.

Guest speakers include: Mike Seguin - N1JEZ Satellite Communications; Dave Olean - K1WHS 6 Meters, the other band on your HF radio; Al Shuman - N1FIK NH-ARES Communications Vehicle

Baked goods will be available. CVRC members are requested to donate a baked good item. Please contact Louise, K1LAS at 603-428-7253.

The CVRC will have a club table. Club members who have a couple of items to sell may place them on the club table in return for taking a turn watching the table.

Outgoing QSLs John – N1FOJ

Sending outgoing DX QSL's via the A.R.R.L. Bureau is one of the premier benefits that the C.V.R.C. provides for its membership. This is done at no cost to you, other than your purchase of QSL's and the time it takes you to fill them out. Simply bring your completed QSL;s to the club meeting, and I will take them, sort them out via the DXCC Country List, and mail them to the bureau for you. Make sure I have a copy of the mailing label from your QST. If you had to do this yourself, it would cost you \$8.00 per pound of cards, plus packing and postage costs, on top of filling the cards out. Doing it via the club simplifies your life quite a bit. Sending cards direct is becoming prohibi-

tively expensive – Air Mail postage is \$0.80 per letter; return postage can be up to \$2.00 per card. Just a simple DXCC award of 100 countries could cost you over \$280.00. Sending via the bureau certainly makes more sense than sending direct, unless you're very rich (Ed. note., in which case – let me know, I've got a list of equipment in need of sponsorship!). Have fun, work loads of DX Stations, and get the cards back cheap!

Until the next time, keep on working 'em!
73, John – N1FOJ

Incoming QSL Bureau Lee - AA1YN

I am one of those who does not chase DX on the DC bands though I've made a number of contacts on 17 and 20 meters. As a matter of fact, I've made 1 DXCC contact below 6 meters for all of 2003. If you were to ask me what the frequency limits of the lower bands, I would have to look on a chart. So with this activity, why should I worry about the incoming QSL Bureau? – simply because I've made 104 DXCC contacts on 6 meters and have 40 DXCC Credits if I get the cards. So with that in mind, I decided to give this a try, I finally went through my DX log for 6 meters and wrote up 104 cards. John was even kind enough to pick them up. Now for the long wait to see the returns. In order to get the return cards, you must make sure you are good in the W1 QSL bureau. This bureau is hosted by the Yankee Clipper Contest Club (YCCC). To do this, simply mail them a check for some amount based on your activity. I mailed them a check for \$20.00 when I first got my license and still have about \$19.00 left there. They do not accept stamps or envelopes. It is more convenient for them to have one size envelope for everyone and makes for easier sorting of the cards. Your money purchases the envelopes for 10 cents each and they then charge your account for the postage when the envelope is mailed. For more info on the incoming W1 QSL Bureau see their web site at <http://www.yccc.org/Resources/w1qslburo.htm>) Their postal address is

W1 QSL Bureau
PO Box 7388
Milford, MA 01757-7388

Christmas Party Photos

By Don Curtis - N1ZIH



A friendly reminder

Dues are due for the 2004 calendar year. Please renew your membership by sending a check in the amount of \$20.00 payable to the Contoocook Valley Radio Club and mail either to the club or Scott - N1ZGO.

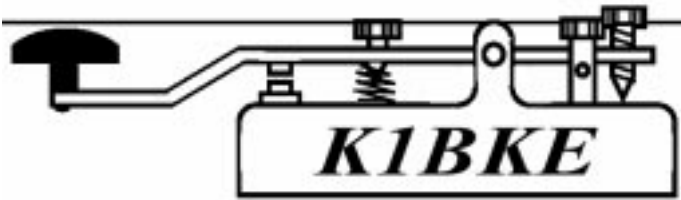
AMATEUR RADIO
EARLY COMMUNICATIONS &
TUBE TYPE BROADCAST SETS
SALES • SERVICE



XPIEXX

Christopher Sleg 13 Main St., P.O. Box 123
603-464-5625 Hillsboro, NH 03244

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.



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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	783-9294
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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