

The KEY

The Newsletter of the Contoocook Valley Radio Club

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

Volume 13, Number 2

June, 2001

Programs

Field Day is coming! This year the annual emergency-preparedness exercise/contest will take place on June 23-24. Don't miss the regular monthly meeting on June 12 where you can learn more about the CVRC's Field Day plans and sign up to help out. Also see the Field Day Committee's report on page 3 for more information.

The July meeting will not be at held at the regular time. Join us on Sunday, July 15, at Elm Brook State Park for a cookout and a foxhunt. We'll meet at 11:00 am and eat between 12:00 and 1:00. The Foxhunt will take place afterwards. The club will provide the burgers, hot dogs, rolls, and condiments (donations accepted). The side dishes will be potluck — everyone get in touch with N1PHZ so we don't all bring potato salad!

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.

C.A.R.E.S. serves the American Red Cross Open House

R. Farley, KB1FUH, AEC, CARES

The Capital area Amateur Radio Emergency Service group held their first -ever joint open house at the Steeplegate Mall with the Concord Chapter of the American Red Cross. The event took place just outside the entrance to J.C. Penney on March 31 and involved a static display by the Red Cross and an active amateur radio station operated by C.A.R.E.S. members. The open house was part of national Red Cross month and was a fitting close to the month-long celebration.

Although a mall is not a location that one would typically expect to see an emergency communications station, it did provide some unique challenges. EC Tom Matisko, N1SKZ

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The KEY is published every other month at the beginning of the even numbered months. The deadline for articles and submissions is the fourth Tuesday (coinciding with the usual business meeting schedule) of the preceding month.

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and AEC Rob Farley, KB1FUH met with mall officials earlier in the month to map out a strategy. It was evident from our first meeting that this was a unique first-time experience for the mall as well. We assured them that we would not burn the place down.

The JC Penney location seemed to be a good location for space considerations and just off the beaten path for the inaugural event. The mall, being such a large building posed some unique challenges to the set-up. Getting to the outside of the building was the first challenge. Mall personnel were very accommodating and allowed us to park our vehicles close to the building, which made equipment loading and unloading very convenient. The location was near an employee access tunnel, which led directly to the outside. We were able to run the antenna feed lines through this walkway without fear of vandalism or damage by mall traffic. However, this required runs of nearly 200'. We used a 75-ohm twisted pair feed line owned by AEC Jerry Blanchard, K1BBQ, which despite its meager appearance, performed pretty well on the HF bands. A run of RG-8X was used for the VHF antenna for the APRS station. The VHF station for the net traffic used a small vertical antenna placed on a ten-foot mast and tripod next to the booth.

The purpose of the active display was to demonstrate the capabilities of C.A.R.E.S. to serve the American Red Cross in the field and to adapt to various "field" locations. At the



same time, CARES was interested in promoting Amateur Radio to the public. As an attraction, CARES offered free message service to mall-goers via the National Traffic System. The timing was excellent with the renaming of the group and was hallmarked by the unveiling of our new CARES banner that was donated by a local business through the efforts of CARES member Bill Shurbert, KB1FAE. Special note should be made about the "attraction getter" that was mounted on the banner stand. This is what happens when you mix firefighters and amateur radios!

Operations Chief, AEC Farley was in charge of putting together the resources to operate the station. The first step was to assemble an inventory of available equipment. Between the equipment borrowed from the ARC station at the Red Cross headquarters and the CARES leadership, a stockpile of equipment was assembled. The mall had a condition that the station be fully assembled prior to the exterior doors opening at 0900 hours. The team assembled at the loading dock at 0700 hours and went to work and easily met the deadline. The second step was the operators schedule. Farley solicited help from stations within the antenna reach of the KA1OKQ repeater on Plausawa Hill in North Pembroke to act as NTS liaison stations. Four NTS experienced amateur operators stepped up to the plate and donated their time to operate their stations in four hours shifts in concert with the field station in the

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Field Day Committee Report 5/23/01

Field Day Coordinators.....K1BBQ Jerry Blanchard, KB9DGB Tim Firkowski, KB1CKT Shawn Upton

We will try for a classification of 4A

- Frequencies to be used to field day.....Band Managers
- 80m.....N1EYF Alan Bardwell
- 40m.....??W1VE Jerry Hull??
- 20m.....N1FOJ John Moore
- 15m.....AF1T Dale Clement
- 10m.....WA1VKO Micheal Murphy

• 80 meters will be operated at night, when one of the other bands are no longer useable. This will allow us to operate 5 bands and still have a 4A classification.

Other Stations to be set up.

- Novice Station 10m.....KB1GAO Chris Lepensky
- VHF station.....K1CYJ Al Marin
- KB1CKT Shawn Upton will be coordinator for station use at field day.

How to gain the Bonus Points

- Public Relations.....Tom Matisko N1SKZ.....100pts
- Information Booth at FD site.....K1LAS Louise French& Sonia Blanchard(K1BBQ XYL).....100pts
- Message Origination.....N1ZIH Don Curtis.....100pts
- Message Handling.....N1ZIH Don Curtis.....100pts
- Satellite Contact.....K1CYJ Al Marin, Tim Firkowski KB9DGB.....100pts
- W1AW Bulletin...AF1T Dale Clement, but we need everyone to try to get it just in case.....100pts
- Demonstrations.....300pts
- Laser.....AF1T Dale Clement.....
- ATV.....KB9DGB Tim Firkowski.....
- EME....(AF1T Dale Clement) or SSTV.....(KB9DGB Tim Firkowski).....
- Site Visit eg. Red Cross, Police..... Tom Matisko N1SKZ100pts
- Alternative Energy.....K1BBQ Jerry Blanchard, KB9DGB Tim Firkowski.....100pts

Method of Logging contacts

- Logging method will be up to the Band Manager.
- Field Day committee recommends paper logs.

Site Layout.....In Process.....

Acquisition of Portable Potty.....N1KTP Dave Connors

Setup of signs for Field Day.....KB1CKT Shawn Upton

Safety Officer.....KB1FUH Rob Farley

How many Generators to run

- 1 good generator will be used to run the whole site.....N1IIC Jason Greene
- A good backup will be available.....N1HXO Steve Ingham
- Ground rods will be needed for Generator & 1 for each station.
- Power Distribution.....N1PHZ Skip Doughty

Acquisition of Fire Extinguishers

Food Coordinator.....N1KTP Dave Connors & K1TXP Bob Peterson

- One or two helpers will be needed to load up food on Friday 6/22/01 & unload Sunday 6/24/01

Will the club pay for food this year due to monies on hand.....Initially unanimously approved at business meeting. General Membership will have to vote on it at the Club Meeting

Lighting of area.....N1PHZ Skip Doughty

Large signs to be posted at each station w/ Frequency and mode.....KB1CKT Shawn Upton

Cutting of Field Day area.....N1PHZ Skip Doughty

Reporting results.....K1BBQ Jerry Blanchard

Photos.....Lee Scott

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mall. The gracious help by Ted Everett, W1ALE; Ken McLaughlin, N1CPX; Conrad Ekstrom, WB1GXM; and Russ Santos, K1TSV made the event run smoothly. An operational schedule was established which provided one member of the CARES leadership and two to three operators on four hour shifts. The event was operational during the open hours of the mall, which were 1000 hrs to 2100 hours.

After setting up and testing the equipment, the group was ready to go. This event featured a fully functional APRS station with a dedicated 2m/440 Kenwood TM-7A rig feeding a vertical antenna on the outside. A secondary monitor was provided for better display characteristics for the visiting public. Next to that was the HF station, which was comprised of a Kenwood TS-930S rig with internal auto-tuner feeding a vertical Outbacker antenna outside the building. A large trash compactor provided a more than adequate ground plane for the two antennas, once the snow was cleared off the top. The final rig was a dedicated 2m rig for the NTS traffic. Future operations will include active displays of other modes such as packet, RTTY, etc.

At first the traffic was pretty slow, but as mall traffic typically goes, it got busier in the late afternoon and evening. The event had many positive outcomes. One of the most interesting aspects of the event was the ability for some new hams to pass NTS traffic and learn about the system. We also benefited by the ability to put a face with a call sign. We look forward to the next opportunity.

2001 New Hampshire QSO Party

Al Marin, K1CYJ

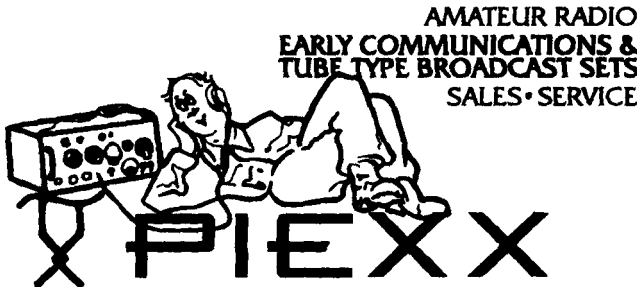
The NH QSO Party in February of this year is over. The results should be known in approximately the first week in May.

The contest started Friday Feb. 2 at 19:00 (7:00 PM) local time through Sunday Feb. 4 ending at 19:00 (7:00 PM) local time

Thanks to CVRC members: AF1T, N1GJF, N1IIC, N1SKZ, W1VE and K1PDY for operating the club call (K1BKE). K1BKE was on the air for 13 hours of the 48 hours the club could operate. Again K1BKE was a bonus station during the contest and making many contact in 7 of the 10 New Hampshire counties, 45 states, 6 Canadian Provinces with many DX stations worked. Total number of multipliers was 59 out of the max 72 allowed, giving K1BKE a score of 28,674 QSO points.

Many thanks go to all the Amateur community for making contacts with K1BKE. Also special thanks to the following club members who operated their own call and donated their points to K1BKE for the contest: WA1VKO, K1DWI, AF1T, N1HKO, N1IIC, N1GJF and K1CYJ. With the K1BKE score and the donation of approximately 165,350 points from club members, CVRC could earn approximately 194,024 points.

The Contoocook Valley Radio Club took the 1st place award for 4 years prior to last year's 2nd place finish to Great Bay Radio Association, W1ZF. Dale Clement, AF1T, was the overall winner with 82,544 points and received a handsome wall plaque for his efforts.



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From the Editor:

Due to some unforeseen circumstances, and a little bit of bad luck, I was unable to put together the April Issue of The KEY. This issue includes articles that would have appeared two months ago. I apologize for the delay — Jock, N1JI

The Mysteries of Ham

Dave Karlotski

HippoPress.com

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The ticket is pink and the fezzes are red. The fezzes are on the old men who sell me the ticket; the ticket says "HOSSTRADERS tailgate swapfest" and "Sponsored by JOE K1RQG + BOB W1GWU + NORM WA1IVB," which must explain a lot, I hope.

I've always known it as Hamfest, a twice-yearly ham radio event which has evolved into something even stranger and now sprawls all the way across the Rochester fairground, rows and rows of campers, trailers, trucks, humvees, station wagons, vans and tents arcing around the empty racetrack and disgorging bins, tables, piles on the ground: keyboards in cardboard boxes, digital cameras with no faces, antique laptops, giant continuous power supplies stacked on tables, old Apple II's piled in the dirt (the whole collection yours for 5\$), an unopened Yuri Gellar psychic power kit, personally charged by Yuri Gellar on the first of each month, still shrinkwrapped! (free), tubs of connectors, spools of cable, hard drives under glass, empty PC towers, and oscilloscopes, oscilloscopes everywhere. There are so many oscilloscopes I'm afraid I might buy one by accident, and who hasn't always wanted an oscilloscope? And a monkey? It's another mystery of ham.

It's a bazaar, a fleamarket of technology, and if this was Tatooine then Watto would be working out of a Winnebago in the back somewhere. They look like fleamarket people and they look like the last people in the world to know anything about computers, but they do. This is a place for people who know what they're doing, or have friends who do. Since I'm certainly not the former I'm relying on Tucker to be my guide.

Tucker's an old friend who's never figured out how to get rid of me (the garlic and crosses didn't work) He manipulates the minds and bodies of computers as easily as other people breathe air, and he speaks the language around here.

It's a beautiful evening to stroll around, to prowl the junkpiles, and the smell of sweet sausages

is intoxicating. There are big tents selling whole PC's, or various combinations of parts, or bins full of cards. When it gets dark nothing changes: we turn on our flashlights and keep inspecting, investigating, flipping things over like raccoons on a riverbank. The merchants huddle over open fires, portable heaters, grills, a sprawling mass of crazy people and technology by firelight and woodsmoke, a medieval vision straight out of William Gibson. There are four or five long tables covered completely with nothing but vacuum tubes, old vacuum tubes in their original decaying boxes, a vast and dazzling assortment of little colored cardboard boxes lit only by the halo-shaped lights strung crookedly over them.

A loudspeaker announces that the flash from the reflective irridium satellite will pass over the fairground at about 4 a.m. I laugh- This is crazy!- but the people I'm with say, Oh, you don't know about the irridium satellites? They take turns explaining to me in simple terms, as one would to a child, about the network of 60 or 70 satellites in low orbit put up for a global cellphone network. The company folded and now the abandoned satellites are a hazard to navigation, and although they work they're going to be brought down before their orbits deteriorate. If someone would buy them and maintain them they'd be a powerful communications infrastructure, but it doesn't sound like that's going to happen. I realize dimly that everyone knows about the irridium satellites but me.

I'd also laughed when Tucker asked me if I had a family band radio- I'd never been asked that before in my life, and he asked me twice, as if it was the most natural question in the world- but now I see that I'm the only person here without an antenna. All the people have antennas, the cars have several bigger antennas, and one vehicle has some kind of radio tower strapped in pieces to its roof; assembled it must be 30, 50 feet high? More?

It's a strange and beautiful night and a helluva place to start buying the parts for my new computer. I only get a couple things (a CD drive, a network card), but starting here it feels like I have at least a chance to learn something, to find a way to live with technology as something more than just an array of black boxes.

Marconi Day 2001

Larry Beavers, W1GTA

Yours truly had the opportunity of participating in Marconi Day on January 18, 2001. For those of you who are asking what is Marconi Day here is the info. First off, I joined the Marconi Radio Club last week. The club is based in Lakeville, MA and periodically runs special event stations to commemorate the life of Guglielmo Marconi. Marconi is generally called the father of radio telegraphy. He didn't invent radio but did develop the commercial use of the medium better than any one else in history. Radio hams can be thankful to Marconi for getting the ball rolling on great hobby back in the early 1900's.

On January 18, 2001 the Marconi Radio Club set up operations at the Old Coast Guard Life-saving station on the beach at Eastham on Cape Cod. The club was issued the call sign W1AA/CC last year by the FCC. When I arrived mid morning to participate, I was really impressed with the setup.

Two FT-1000MPs and one FT-920 were setup on HF running CW and SSB on 10, 12, 15 and 20 meters with dipoles and two multi-band verticals (R8's) on the beach. A VHF/UHF position was operating as well. The rig had 73-144/440 repeater frequencies programmed in so that the operator could sequence through each of them, one at a time to put out a QRZ. It was interesting to note that the site launched an HF signal to the east with ease but it turned out to be a hole as far as VHF and UHF was concerned. Only about 35% of the repeaters in the area could be accessed, well.

20 meter CW seemed to be the most productive with 500+ QSO's by time I left for Fall River at 1:30pm. Laptops ran the rigs as well as logging with the CT program. Pretty slick. A Bencher paddle was kept handy to run the built-in keyers in case you had to say something that was not programmed in. to the computer. Speed was about 25 wpm.

Thursday was an unusual day to run this thing but it was the actual date in 1903 that Marconi engineers sent the first message by ra-

dio from the Wellfleet site in the USA to the Marconi site at Poldhu, England. Oh, by the way, the /CC at the end of the call sign was the designation Marconi used for Cape Cod. He first used CC then changed it to MCC in 1901. The FCC in 1917 made him change it WCC in accordance with the new call sign regulations. WCC was then transferred to Chatham where RCA and MCI ran the installation for some years. I had a chance to visit WCC a few years ago and even then, they were in the process of converting over to satellite communications, in the process of replacing CW as a medium for ship to shore comm. The WCC receivers were located at the Chatham site and the transmitters were located in the salt marshes a few miles to the south, remote controlled via landline.

All in all, it was a fun experience. I swapped out a work day to have the day off. It was a great chance to meet a bunch of pretty good operators, operate from a historic site and make some new friends in the US Park Service. The park rangers were quite interested in the goings-on and got a big charge when we made contact with II1FGM at Marconi's home town in Balogna, Italy on 12 meters. The whole event was kind of like Field Day in January!

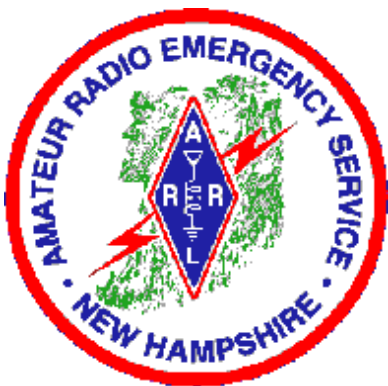
The QSO total at the end of the day was 1,054 with 53 countries worked on CW and 42 on SSB.



*CVRC members gather outside the Marconi Museum in Bedford, NH, on Tuesday, April 10, 2001
(Joe Kangas, N1ZID - Photo)*

Capital Area ARES Corner

**Tom, N1SKZ, Emergency
Coordinator**



Net: 20:00 Local Time, Mondays
Frequency: 146.895 - (CVRC Repeater)
Alternate: 147.570 Simplex

E-mail: N1SKZ@ARRL.NET
Phone: 464-4095 (evenings)
www.qsl.net/merrimack-ares

It has been a busy winter for ARES with restructuring, activations and participation in ham radio and Red Cross events. First up in this article, restructuring.

For those eagle-eyed amateurs among us, you will notice the name of this column has changed. Your local ARES group is no longer "Merrimack County ARES", but rather, "Capital Area ARES". Why the name change? Well, simply, our jurisdiction extends beyond the borders of Merrimack County and extends into neighboring Hillsborough County. Likewise, our neighbors to the north, Belknap County ARES, have some of Merrimack County in their operational area. The name change made sense to both Capital Area and New Hampshire ARES leadership as it identifies us with a geographical area rather to county boundaries. So, henceforth, we are now known as Capital Area ARES (CARES).

Also under the title of restructuring is the addition of a third assistant emergency coordinator for CARES. K1BBQ, Jerry Blanchard, joins KB1FUH and N1PHV as AEC for logistics. In this role, Jerry will have responsibility for supplies and equipment. In time, Jerry will compile a list of what types of equipment will be at our disposal for activations, tests and public service events. For the most part, this equipment will be the personal property of our members and will be brought with them when we are activated. In time, CARES may be able to collect a core equipment set that will be the property of CARES and ready to go at all times. Currently Jerry is working hard on composing a draft of the CARES emergency plan. This plan will outline our response plan to client agencies and document an activation call tree and memorandum of understandings (MOUs). Part of this plan is defining repeater coverage for our primary repeater (146.895, CVRC) and our secondary repeater (147.225, KA1OKQ). Several hams have helped Jerry in defining the coverage areas for these repeaters and their help has been instrumental in defining operational boundaries. I would like to thank all those who have assisted Jerry in this effort.

CARES also participated in two events since the last issue of this column was published. The first was handling talk-in station duties for the Contoocook Valley Radio Club flea market on the 25th of March. The second event was a joint public relations event held in conjunction with the Concord chapter of the Red Cross. The latter event was held at the Steeplegate mall in Concord on the 31st of March. Please refer to the article, in this issue of *The Key*, written by KB1FUH detailing this event.

What's up next for CARES? In one word, training. Upcoming nets will be structured to train CARES members, and anyone else who would like to participate, in NTS traffic handling, preparing a go-kit and for unexpected occurrences. Please feel free to check into our nets at 20:00 local time, Mondays, on the 146.895 CVRC repeater.

Review of past Programs

Dale Clement, AF1T

MARCONI MUSEUM VISIT At least 20 people showed up at the Museum in Bedford, N.H. on April 10th. Several of us dined at the nearby Weathervane Restaurant beforehand. Our host for the evening was Ray Minichiello, W1BC who regaled us with anecdotes about radio history, and a massive collection, which occupied several rooms. He even bestowed a few door prizes - artifacts salvaged from the old Marconi Site on Cape Cod. The group was split for the tour, and some of us viewed a fascinating video about Marconi's life. Our club presented Ray with a one-year honorary membership. Many thanks to Ray for this memorable program.

INTRODUCTION TO "FOX-HUNTING"

Our May presentation was about Radio Direction Finding (RDF) techniques, and hidden transmitter hunts. Finding a "Fox", or hidden transmitter, is a very popular radio club activity. This can be as simple or complex as desired, with various ground rules for competitive events. Most of these take place on 2-meters. We were fortunate to have three speakers: Mike Dawson, K1BUC from Derry showed us his home built gear and antennas, including one incorporating switching diodes controlled by a 555 I.C. oscillator. Paul Gifford, K1NL told about his experiences with fox hunting on 10 meters. Our own Ken Wilkins, K1MID demonstrated his Doppler RDF system, which consisted of four electronically steered antennas and an L.E.D. readout accompanied by audio directions for locating the radio signal. Ken and Mike supplied circuit board handouts. A recommended book is: *Transmitter Hunting- Radio Direction Finding Simplified* by Joseph D. Moell K0OV, and Thomas N. Curlee WB6UZZ. McGraw-Hill, Inc. 1987. ISBN 0-8306-2701-4 \$19.9 Come prepared for a club fox hunt and picnic on July 14. See details on upcoming programs.

Amateur Radio Classes

Dale Clement, AF1T

Our annual licensing classes commenced on February 5, 2001 and culminated with a V.E. test on April 16. We had planned to end earlier, but two classes were cancelled due to snowstorms. Classes were once a week for 3 hours, with a break and code practice. Thanks to K1DWI, we were able to use a room at N.H.T.I. in Concord.

Several amateurs contributed to teaching and demonstrating. Their efforts are greatly appreciated. Thanks to K1RAB, K1DWI, K1CYJ, N1SKZ, N1JHJ, N1IIC, and WD1V. Special thanks to Al, K1CYJ who faithfully transported me every week. The V.E. session was organized by KY1M, with assistance from W1TTU, and W1PID.

Not everyone was present at the test session, nor did everyone pass all the elements they took. Congratulations to new amateurs: Christine Metcalf (Technician), Dan Daly (Technician Plus), and Tara Kirby (Technician). Congratulations to upgrades: Allen Bardwell N1EYF (Extra), and Kevin Gray N1IYJ (General). The club will need your help in conducting classes next year.



Here are some photographs of the first-ever Hosstraders hamfest held in Hopkinton. Photos courtesy of Joe Kangas, N1ZID

