

# The KEY

The Newsletter of the Contoocook Valley Radio Club

Volume 10, Number 1

February, 1998

## Where Do We Go From Here?

Larry Ledlow, N1TX

Last month I officially assumed the responsibilities of CVRC President. I thought a few words

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## Programs

**February 10** — Don't miss part 2 of the CPR certification begun last month by Alan McCartney, N1KAK. In addition, we will conduct an informal debriefing on the 1998 NH QSO Party from the previous weekend (See elsewhere in this issue for more information on the QSO Party).

**March 10** — The Ice Storm of 1998 will surely go down in the record books as one of the most costly natural disasters in our region in recent history. Don't miss this exciting program where officials directly involved with the efforts in New London and other communities will give us their perspective on the event. Particular attention will be paid to the role amateur radio played in this saga.

CVRC meetings are held on the second Tuesday of the month. Members and nonmembers alike are welcomed. Talk-in is on the K1BKE 146.895 -600 kHz repeater.

*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.

## Merrimack County ARES Corner

Ron Herman, K1PDY, EC



**Net: 8:00 Monday, Local Time**  
**Freq: 146.895 (CVRC Repeater)**  
**Alt: 147.57 Simplex**  
**PBBS: 145.57 (K1PDY-1)**

Well it's been an eventful month for ARES. As most of you know by now many amateurs were called to assist towns effected by the ice storm in early January. While New London saw the greatest participation, Springfield, Washington (K1JY), Bradford (N1KAK) and Sunapee also had some amateur involvement. There were probably others around the state but not known by this writer. Amateurs came from as far Western Rockingham, Vermont and Massachusetts. The greater Merrimack County area was represented in New London by N1GAQ, N1GJF, N1IIC, N1JI, K1PDY, N1QGM, N1SKZ, N1VRT, WA1VVX and W1XV. N1RCQ came down from the lakes region as well. KA1VIC from Bow was drafted for service in Sunapee and WA1UKV did a stint at NHOEM with N1KPT monitoring the frequencies from the home base. Not to be left out was K1DBL who was in New London in a professional role.

In addition to helping out in the home town, K1JY also was called to connect a couple of "very

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about my visions (or delusions), expectations, and hopes for the club would be appropriate. Only a few weeks have passed since my election, however. So if you expect a Grand Plan to be laid out, I can confidently assure you of great disappointment. In any event, just remember a change in helmsmen shouldn't necessarily alter the course of a ship.

I believe we must first take stock of where we are and how we got here before deciding on any course changes. Under the leadership of Cal, WA1WOK, the club has prospered in many ways. These accomplishments should not be understated. The key ingredients have been effective teamwork, a dedicated core of activity participants, and a broad spectrum of experts and resources represented within our ranks. We have had some important membership turnover in recent years, and the new blood has kept CVRC invigorated. Even with two new officers at the top, the basic ingredients for success haven't changed.

As with most organizations, many of the same faces appear at every CVRC activity year after year. The same backs have ached after every Field Day for the past ten years, for example. These truly active members provide the club's heartbeat. Their dedication and occasional sacrifices mean longevity for our modest group. Their ranks need strengthening, however, and I strongly urge you to volunteer for at least one regular club activity throughout the year. That could be anything from Field Day Committee to helping with a license class. Contact one of the club officers to find out where your assistance can be of most use.

Demands of family and career exact tolls from our hobby time, and few people can make specific, long-term commitments to a radio club. There are many ways to help with minimal time demands. For example, writing a newsletter article or a local press release can be easily managed in the minutes or hours between diaper changes and staff meetings. If you enjoy drawing or graphic layout, how about working on club-related graphics such as QSL card, t-shirt, or even Web page designs? Publicizing CVRC in your e-mail signature or providing a link from your Web page is quite painless, too. Even something as simple as saving your receipts from

equipment purchases can really stretch club dollars. (See the separate item on AES' club incentive program.) These "little things" can make an enormous difference in our club's health.

Lest you think I diverge from my original thoughts, I can summarize my key point here: CVRC remains a strong, vital club thanks to so many helping. Yet, there are many ways (and reasons) more members can (and should) lend a hand, all while maintaining a proper balance with other commitments in their lives.

I am a realist in that I understand the natural limitations of a group's capacity to take advantage of its own resources. Pleas for continued and additional support from members can only do so much. Seeking outside support for our activities is an area I hope can prove fruitful, however. Improved liaisons with government departments, businesses, organizations, and local residents of our communities will be one area I will personally lead. Also, CVRC and the Central NH club have begun discussions about having joint activities, in effect pooling our resources to serve regional needs even more effectively. Both clubs should benefit greatly.

Given the potential for sustained growth, the next natural question should be, "Where do we go from here?" That depends on your desires and how well you communicate them to us. When you renew your membership, take the time to send a brief note with your dues. This is especially important for those of you who do not attend meetings. Tell us what your interests are, suggest services you would like to see for your dues, and above all, be frank with your compliments and criticisms.

I look forward to a wonderful 1998 as CVRC's club president, and I thank all of you for your support.



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large" batteries up to the 442.35 MHz repeater which had been running on its own for several days. It and the repeater it's linked to on Kearsarge provided a vital link between Concord and New London.

All agreed that we did well, learned a lot and that there is plenty of room for improvement. WA1ZCN, a New London resident, ran the radio operation there and provided an effective interface between us and the town management. Comments from New London townspeople were positive and in many cases enthusiastically so. In New London, we provided communications from the Emergency Operations Center (EOC) to road blocks at the edges of town, to the staging area set up at the elementary school and from a temporary dispatching center to vans that provided transportation for people to get to shelters and to take bottled water and firewood to those who needed it.

As a humorous side note, we also provided backup communication for the National Guard who arrived on the scene with cots, packs, insulated clothing and state of the art transceivers that didn't work either because of dead batteries or improper programming. A radio tech arrived on Saturday and was able to get some of their radio equipment working. He brought an HF rig but had to scrounge for proper adapters to hook up the antenna. They also needed to send out for personal effects such as toothpaste, soap, etc. Apparently the National Guardsman's checklist doesn't include these items. It was good to work with them though as they come from all sorts of backgrounds. I never did adjust to being called an "RTO" however. That is military for "Radio Technician/Operator" or something like that. They couldn't seem to adopt the term "ham" for us.

Hopefully the outcome of it all will be a better trained group for the next time. I hope to see the creation of some sort of operating procedure or checklist for what to do when you arrive at the scene of an emergency. I think that guidance is lacking in most of the ARES publications that I have read. Here's hoping to see more of you on the Monday night ARES net.

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## **CVRC Flea Market**

The first ever indoor CVRC flea market will be held on Sunday, March 29 at the Henniker Community School. The doors will open at 8:00 am (7:00 for sellers) and admission will be \$2.00 for all. The cost for sellers is \$8.00 and a table will be provided free of charge (Please note that sellers may not bring their own table). There will be a 50/50 raffle for \$1.00 per ticket. A VE session will be offered in another room so, if you're ready, this could be the time to go for that upgrade you've been working on. To reserve a table at the flea market call John Moore, N1FOJ, at 746-4817 (alternate: Jock Irvine, N1JI, at 428-3476 x256). To preregister for the VE session (not mandatory) call Dexter Howe, KY1M, at 938-2955 (alternate: Larry Ledlow, N1TX, at 588-6103).

### **Call for Nominations**

Don Buchanan, N5FGO, has offered his resignation from the Vice-Presidency because of an extended business trip that will keep him away for several months. In keeping with the Club's bylaws, we will elect a new Vice-President at the March meeting. Nominations for that position are now officially open and will close on March tenth just before the vote is taken. Election will result from a two-thirds majority of members present at the meeting. Don had also offered to be Program Coordinator for 1998 and we need to fill this position as well. Please contact any club officer with your nominations for Vice-president or recommendations for Program Coordinator.

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# ***A Lesson Learned from the New London ARES Operation***

***Tom Matisko, N1SKZ***

On January 8th the call went out that our help was needed! The Northeast and Canada was pounded by a major ice storm that left millions of people without power. I like many other hams in NH received a call from K1PDY, Merrimack County RACES Emergency Coordinator, to get ready to be deployed to the New London area. As I was rounding up the necessary radio equipment and personal items, I started to wonder how the 2 meter gear I was taking with me would be powered. I knew that most of the area was without power, so I assumed that the equipment that I would use would be either the mobile rig in my car or my HT.

Upon arriving at the New London Hospital, I was informed that my assignment would be to act as net control for transportation vans being used to evacuate residents from their homes. K1PDY had a 2 meter antenna and power supply that was assigned to this position and I went to my car to pull the mobile rig. The problem that became immediately apparent when we attempted to interface my rig to K1PDY's equipment, was incompatibility between the connectors on his power supply and my rig. The problem was resolved by pulling the pins out of the connector housing on my rig and securing the pins directly onto the binding post of his power supply, a Mickey-Mouse solution at best. The problem could have been avoided if both K1PDY and myself used the standard power connectors suggested by the ARRL.

In the ARES Field Resources Manual published by the League, a recommendation was put forth that all Amateurs use MOLEX Series 1545 connectors on their equipment. These connectors may be found at most any electronics store including your local Radio Shack. The Radio Shack part number



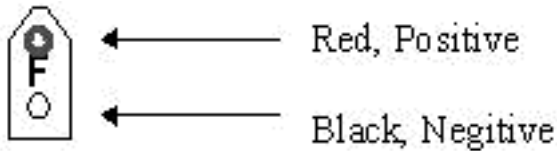
A Category 3 hurricane will cross through New Hampshire during the week of April 20, 1998! How do we know this? Stay tuned and listen for the formal announcement of "Response '98," a state-wide emergency preparedness exercise involving many New Hampshire communities. Be prepared to provide any assistance that may be required. FEMA (The Federal Emergency Management Agency) will be coordinating this effort.

for the connectors is 274-151 for the male side and 274-154 for the female side. The connectors, at 99 cents each, are affordable on most any budget. Using the right connector is not enough. To be truly compatible, and to protect your rig, all Amateurs must also wire their equipment to the same standard. The illustrations on page 5 show how these connectors should be wired:

Think of how much simpler life would be if all hams would implement this change! Some of you might be thinking that it would be a real hassle to

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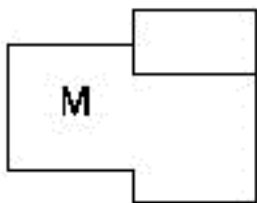
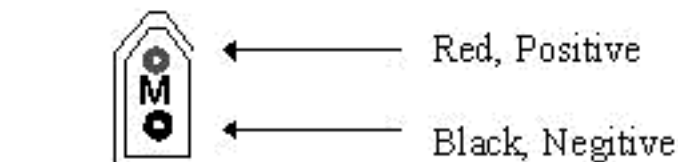
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Female Connector to  
Power Source

change the connectors on all of your equipment. How about making an adapter cable with the standard MOLEX connector on the power end and your favorite connector on the rig end. While you're happily wiring away, why not make another cable that has a cigarette lighter adapter on one end and a MOLEX connector on the other. You never know when you might be asked to provide communications in a evacuation van or other type of vehicle.

This one simple change will help us be better prepared to serve when we are again needed. Whether it's for an emergency or a public service event, we can always find ways to be more efficient communicators.



Male Connector To Rig

## **N1TX Makes a Clean Sweep!**

**Dale Clement, AF1T**

An inspiration to operate the ARRL November Phone Sweepstakes resulted in a weekend of fun for three of us. The idea started with a phone call from Mike Murphy, WA1VKO, who apparently wanted to make up for all the operating he missed during Field Day. Larry Ledlow, N1TX, agreed to round out the trio, and to supply his KT-34 tri-band beam for the effort. We set a goal - to contact all 79 ARRL sections during the contest.

We needed to erect a 40 ft tower for the tribander, in an area of my yard that had to be cleared of sumac trees. This project became difficult in the increasingly cold weather. I managed to install a pair of full-sized phased verticals, with elevated radials for 40 meters (the same ones used for Field Day), and got them well matched across the band. The KT-34 had so many pieces to assemble that N1TX made several trips to my house. a major snow-storm on Friday, November 14, kept us from installing it on the tower until the day of the contest! What a chore this turned out to be! The element ends, with their myriad projections of tubing and insulators, kept snagging in the tower's guy wires. and the snow and cold didn't help. the three of us, assisted by Joe, N1ZID, and Jolian, N1ZIE, got it up just before dark Saturday. the rotator had to wait until Sunday, and required three spliced cables to reach the house. We were rewarded with a low S.W.R. on 10, 15, and 20 meters. Thanks to Larry, N1PHV, for lending his MFJ SWR Analyzer and for help with the tower.

We decided to use N1TX as the station call (of course, Larry will get all the QSL cards). It was a real attention getter. Anyone who has operated Field Day with Murph knows that he is a real power house operator. Larry kept up the logging and duping on his laptop computer. We were able to attract a pile-up and our QSO rate

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often exceeded 100 per hour on 80, 40, and 20 meters. It was a good feeling to log the last few multipliers - UY1JA in Yukon (#77), KL7HFQ and KL7J in Alaska (#78), and VO1MP in Newfoundland (#79) - for a clean sweep! Our secondary goal of 1000 contacts was easily realized Sunday night. I was especially pleased with the performance of the 40 meter array; over 500 contacts were made on this band. 10 meters was virtually dead.

Murph supplied some excellent chili and lasagna to keep us going (alas, no "natural power" bonus as in F.D.). We all had a great time and are looking forward to more events like this. Getting together with a few radio friends is a great club activity!

## **1998 NH QSO Party**

### **Cliff Eisner, N1GJF**

It is that time again to enjoy the New Hampshire QSO Party Contest. This is the 53rd Annual QSO Party. The contest weekend is February 7th and 8th. Our club has the honor of winning first place in the last two QSO parties. With a little effort from the club members, we could do it for the 3rd year in a row. In order to put the club (CVRC) on top again, the club needs some support from its members. K1BKE is a bonus station (Large club category) and can be operated during the full 48 hours of the contest. There is a need for club members to donate some time to operate the club call for some

time in the contest. I have made a list of 48 - one hour blocks for operating during the contest and if club members want to operate more than one hour, that would be great. The time donated to operate K1BKE can be done in your own shack or you can team up with a ham buddy and have fun together. Please contact me, Cliff Eisner (N1GJF) to sign up for some time to operate K1BKE. After the contest please send me the logs so I can combine them all to one log to submit to NHARA QSO Party Chairman. I need these by the March 10th regular meeting or sooner. This will give me time to submit to the NHARA by March 31st dead line. The second way that club members may help, is to operate your own call in your home or with a ham buddy and donate your points to the club (K1BKE) The Contoocook Valley Radio Club. Individuals may operate their own call for total of 24 hours in the 48 hour contest time frame. The summary and log sheet must be sent in to NHARA QSO Party Chairman Richard Force, WB1ASL, before March 31st. If you give the sheets to me by March 10th CVRC Meeting, I will submit the logs at the same time as K1BKE. After March 10th date, you must send in sheets yourself. Be sure you sign the summary sheet and name of club (K1BKE) to receive the points donated. I would appreciate after the contest, if you would send me a copy of your summary sheet, so I can put together a report for the Club as to approx. amount of points the club had earned and that were donated. Please send to my attention Cliff Eisner, N1GJF at P.O. Box 88, Henniker, NH, 03242. NHARA information sheet, set of rules can be found on the Internet at: <http://homepages.together.net/~bhabooks/nhqso.html>. Logging software is available to download from the Internet. If you do not have access to the Internet and would like a copy of info and software, please let me know as I made extra copies. The software works both in Dos and Windows 95.

Reminder: Please get in touch with me if you would like to operate the club (K1BKE) call in the contest.

In advance, thanks for your support.

K1BKE (CVRC) QSO Party Chairman, Cliff Eisner, N1GJF. P.O. Box 88, Henniker, NH 03242, (603) 428-7612 e-mail: [c\\_eisner@conknet.com](mailto:c_eisner@conknet.com)

# 10 GHz Snow-Scatter

**Dale Clement, AF1T**

I wished to try 10-GHz (10,000 MHz) during the January 17 - 19 ARRL VHF sweepstakes, so I installed my portable 1 watt transverter, behind a 2 ft. rotatable dish antenna, on the tower 35 feet above ground. This would be an improvement over my usual strategy of aiming through the bedroom window. The transverter uses a 2 meter multimode radio for the 1.F., thus allowing operation from the shack through 2 long run of RG-58/U. A second cable fed +12V from the power supply. TX/RX keying was accomplished via a D.C. voltage fed through the I.F. cable. N1TX can testify for the effectiveness of this transverter - he used it to make 60 contacts during the September weekend of the 10 GHz contest. Sure enough, WA1VVH's beacon on 10,368.200 MHz, came barreling through, full scale, from Peperell, MA.

During the S.S., I worked Don, WB1FKF, in Woburn, MA (57 on SSB), and Tom, WA1MBA, in Shutesbury, MA (549 on CW). Tom is blocked by Grand Monadnock, so this contact was probably by knife-edge diffraction. I'm somewhat blocked by trees in his direction; getting higher should improve signal-strength considerably.

On Sunday, Paul, N1BWT, called on the phone from Shirley, MA, and wanted to try snow-scatter. His station was indoors, with the antenna aimed through a skylight. We used 144.260 MHz SSB for liaison. At first, I heard nothing. then Paul rotated his dish 90°, and there he was! Polarization was important. Paul's signal was scattering off an overhead snow cloud. We quickly worked on CW. Then Ken, W1RIL, in Paxton, MA broke in to say he was hearing me. We made a 10 GHz snow-scatter contact over what would normally be a rough path, as he is blocked by Mt. Wachusett. (N1BWT has a website recording of our 10 GHz snow-scatter contact at <http://www.qsl.net/n1bwt/index.html>).

This was becoming intriguing. I had worked via rain-scatter before, but never realized snow-scatter could be so effective. Apparently, snow-

flakes are a considerable part of a wave-length at 10 GHz. the scattered signals tend to become distorted (it sounds like 6 meter aurora), and there is a Doppler shift in frequency. CW is best, but SSB or FM will work when signals are strong. (Note that scattering through the atmosphere is what allows us to see visible light well after sunset).

I decided to leave the transverter up on the tower for a while (hoping that a plastic bag would keep water out). On Friday, Jan. 23, during a major snow-storm, I called Dél, KD1DU in Ridgefield, CT (south-west of Danbury, not far from New York City) for a sked. He is exactly in line with WA1MBA - right through Monadnock. We tried and easily worked on CW over a 255 Km path! I later worked W1RIL an WA1MBA and recorded their loud SSB signals. Too bad there wasn't someone in NY or NJ to work.

There is a lot to be learned about our microwave bands. Please join us - we welcome the activity!

## **AES Helps Radio Clubs**

**Larry Ledlow, N1TX**

Many of you recently received Winter 1997/98 catalogs from Amateur Electronic Supply. Page 135 contains a description of their new special incentive program for ham radio clubs. AES will allow one percent of club members' invoice total towards a club purchase. Say you buy a new HF radio for \$1500 through AES. Then the club will receive credit of \$15.00 towards the purchase of anything in their catalog. The program covers purchases made from September 1, 1997 through September 1, 1998. Simply turn in copies of your receipts to the club treasurer or another officer, and we'll take care of the rest!