

F.C.A.R.C. Inc.
P.O. Box 773
Greenfield, MA 01302



FIRST CLASS MAIL



THE COMMUNICATOR

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January 2015

Upcoming Events

- New Year's net: Wednesday Dec 31, 11:50 pm. : 146.985 MHz
- Sawmill River Race: Thursday, Jan 1, 9:00 a.m. for radio ops: Montague Center
- E-Board Meeting: Monday, Jan 12, 6:00 p.m.: GCC Room S301 Main Building
- Program Meeting: Monday, Jan 12, 7:15 p.m.: GCC Room S301 Main Building
- Club Breakfast: Saturday, Jan 17, 8:00 a.m.: Denny's, Greenfield
- Sleigh Bell Race: Saturday Feb 7, 9:00 a.m. for radio ops.: Greenfield
- E-Board Meeting: Monday, Feb 9, 6:00 p.m.: GCC Room S301 Main Building
- Program Meeting: Monday, Feb 9, 7:15 p.m.: GCC Room S301 Main Building
- Club Breakfast: Saturday, Feb 14, 8:00 a.m.: Denny's, Greenfield
- VE License Tests: Monday Feb 23, 7:00 p.m.: Northfield Unitarian Church

January 2015

Calendar

JANUARY AND FEBRUARY MEETINGS

Note because of Martin Luther King Day holiday in January and President's Day in February, the e-board and program meetings that would normally take place on the third Monday of the month are scheduled on January 12 and February 9, the second Monday.

THE SAWMILL RIVER RACE: THURSDAY JANUARY 1, 9 AM

The Sawmill River Race in Montague will be held on Wednesday January 1 and the FCARC will again provide communications. Contact Richard Stewart KB1NOX, stwricha@aol.com, to volunteer or for more information.

SLEIGH BELL ROAD RACE

We have again been asked to provide communications support for the Sleigh Bell Road Race, part of the Greenfield Winter Carnival on Saturday February 7st. The race starts at 10am and pre-registration for the race opens at 8:15am. Radio ops should report by 9:00 am. Contact Richard Stewart KB1NOX, stwricha@aol.com to volunteer or for more information.

Secretary's Report

E-BOARD AND PROGRAM MEETINGS, MONDAY, DECEMBER 15, 2014 – CHRIS MYERS KB1NEK

There was no program meeting in December and the program meeting was replaced by the holiday pot luck and auction (see below).

1. Repeater Repairs

- a. Earlier in the day, Al and Bob Dickerman had replaced the tone circuit board on the controller of the Leyden repeater. So far, this replacement has succeeded in preventing interference from the W1JY repeater in Gilford, New Hampshire or KA1RCI in Exeter, RI.
- b. Work is still needed on the repeater equipment normally placed at the Leyden site, and on the 440 equipment at Rocky Mount, in Greenfield. Rich Stewart has provided Al with two other used VHF repeater units that may be useful in getting things working better.
- c. Al asked Josh, the engineer for WPVQ if he thought we might be able to get a key so we could get access to the equipment at any time without an escort. Josh said he would have no problem with that, but that it would be up to the station manager, Dan Guinn.
- d. Al spent about \$104 to buy two tone control circuit boards, and asked for reimbursement. The board voted to do that.
- e. Chris asked whether we might consider spending about \$1,300 to buy a new repeater. Al said he and Bob are not yet losing interest in trying to do the repairs necessary to keep the old equipment running. No one present supported the idea of buying new equipment.

2. 2m Repeater Coordination changes: Within the next month the New England Spectrum Management Council (NESMC) will be counting members votes on the question of continuing the changes made on a one year trial basis about a year ago. Al is the club member with a

vote on the council. He said he voted against the change when it came up last year, primarily because of the way it was made - with little outreach to hams outside of NESMC who would be affected, and because of a last minute change in the terms of the proposal. Chris relayed objections from K1II, Charlie Dunlop, who is active in RACES in Hampden County. Charlie objects to the way the new plan took away frequencies that had been used for years for standard FM simplex communication. Chris said that Charlie also claims the NESMC has done nothing to weed out frequency pair assignments that are inactive, and that the new plan goes outside of the range for repeater operations stated in the ARRL band-plan. Chris stated that he had not been able to verify Charlie's claims. A proposal was made to ask AI to vote against extending the plan initiated last year. The board was unanimous in favor of the motion.

3. Jan. 10 ARRL Division meeting AI said that he received an invitation to the ARRL division meeting in Springfield on Jan. 10, but has a conflicting commitment, and asked if Chris was interested. Chris agreed, and will go with Ron, who as vice-president receives an invitation on his own. Several board members urged Ron and Chris to raise the issue of the 2m coordinating plan.

a. 4. Honorary membership a. Rich Stewart asked to have his dues waived for a year in return for the equipment he has provided - the board approved.

b. Chris suggested giving lifetime honorary membership to Dick and Mildred Burnham, Bill and Betty Boutwell, and Barb and John Berrigan, if and when they ever stop paying dues. A motion was made to extend the offer of honorary membership to the three families, and passed unanimously. [The next day Howard informed me that the Berrigans and the Burnhams have paid through 2015.]

c. Chris reported that he had written a letter to Ted Merrill to thank him for the donation of equipment and mentioning that it could be claimed as an income tax deduction, since the FCARC is a 501(c)3 non-profit group. He said he has had no response on the suggestion. Chris also said he planned to write a similar letter to the Berrigans to thank them for the donation of equipment earlier in the year, and the offer to try to come up with a valuation for all of it if they decide to itemize deductions on their tax return. [Saturday, Dec. 20, Barbara Berrigan called in response to the letter, and said she and John appreciated our expression of gratitude, but did not plan to itemize deductions.]

5. Future Program topics

a. Field Day - We expect a couple of new enthusiastic members this year to participate, both at the GOTA station and the main stations. Chris reported on the sale of the LDG AT-1000 auto antenna tuner, and suggested we replace it with the lower power model also made by LDG. The LDG AT-100 can be used for any transceiver running up to 100 watts. There is a model specific to the Yaesu FT 857 and 897, and a model specific to Icom transceivers without built in tuners such as the Icom 706, which the club owns. The generic model is more expensive, and requires one or two extra steps to operate than the models made to match specific radios. Chris later found out that one reason for the extra cost of the LDG AT-100 (generic) is that it has a bigger LED indicator display on the front panel than the model specific ones. Even so, LDG offers special cables that would allow it to connect to the Icom 706 and allow the tuning to be controlled from a button on the ICOM. This also automatically switches the rig to low power then sends a signal that the tuner uses for its functioning.

There was also discussion about Roy's suggestion to see if we can use the flag pole on top of the Poet's Seat Tower for an antenna. We will have to experiment to see if the pole is grounded, and if there is actually any way to connect to it in a useful way.

All of these questions make it seem important to have a club meeting devoted to the discussion of Field Day

- a. We are still interested in an idea raised earlier to invite someone knowledgeable about the process of repeater coordination, possibly someone from NESMC itself.
- b. Chris suggested military radios.

AI emphatically asked those who made suggestions to make contacts with someone to invite to make a presentation.

News, Activities & Articles

NOVEMBER 24TH VE SESSION

In the last issue of the Communicator, we reported that the November VE session was a very busy one with 16 tests administered. Here are the results:

Scott Phelps is a new Extra: AB1WU
Jessica Bower is a new General: KC1CXZ
Scott Wichowsky is a new General: KC1CXY
Aaron Addison is a new Technician: KC1CXX
Andrew Bower is a new Technician: KC1CXW

Also at the November session, Russ Pasternak N1TOC (new Tech in August) upgraded to General.

If you hear any of these folks on the air or meet them anywhere say hello and offer to help them as they learn all the things about amateur radio that they didn't have to know to pass a test.

NEW TRUSTEE FOR THE FCARC REPEATER CLUB LICENSE KB1BSS

AI Woodhull N1AW is now the trustee of the FCARC club license KB1BSS.

HOLIDAY POT LUCK AND AUCTION

The annual FCARC Holiday Pot Luck Party and Auction took place at the GHS cafeteria on Wednesday December 17th. As in past years there was much good food and an auction of mostly radio and electronics stuff, with AI N1AW serving as the auctioneer.



APRS AT N1YPS, PHILL GRANT, N1YPS

This is a brief overview of my experience trying to put together various pieces of equipment to make APRS a reality for me. Automatic Position Reporting System was developed by Bob Bruninga, WB4APR for the use of GPS data over Packet (already well known by hams) on HF and VHF ham band frequencies. Mobile or fixed locations can be transmitted, relayed, and seen by others on similar equipment, or on various internet sites where a transceiver is not needed. Messages can be sent back and forth...also as packets. A few 'googles' of APRS will yield a wealth of information on this activity and what is needed to set up an APRS station of your own.

My first success at APRS was using the following items: IC-706 transceiver, MFJ 1278 terminal node controller, a software program called UIVIEW and my Windows XP PC. N1YPS was a fixed station then, so GPS input wasn't necessary. The hard work seemed to be making the interface cables, and getting the software to understand what I wanted to do. Again, there are websites loaded with schematics and info, none of which insure instant success.

OK, I'm a copycat. If I've seen it done by others, on YOUTUBE for example, I want to see if I can do it. I try to use what stuff I have available and buy as little as possible. Well, in my exuberance, I bought a few things as my photos reveal.

System #1: The Tracker T3, in the Altoids box, is made by Argentdata (www.argentdata.com) and costs me \$40. It comes as a PCB board (like mine), a USB dongle or in a box with a terminal block for connections. The Garmin Nuvi 350 GPS (obtained on ebay) supplies the current location PLUS acts as a display of other APRS stations on whatever maps are loaded into it. Although my old Kenwood HT is shown; any 2 meter transceiver will work providing you can access the mic input, PTT line and receive (speaker) output. Of course, you could spend hundreds and buy a TM-D710 or FTM-350 transceiver where half the work is done for you. I made cables to connect my existing TM-V7A, IC-706 and an old TM-2550 A/E. All worked... after a fashion. The only software needed is inside the Argent T3 tracker. The parameters are set through a Argent provided bit of software or through a comport terminal program. I had to buy a FMI cable from Garmin that utilizes their system of waypoints, however. A word about GPS receivers. The old ones, Garmins and others, had a NMEA output which APRS requires to determine your current location. There was also the need to convert this gps data to RS-232 or USB so the PC can process it. Today, most GPS units do not output gps info. Their data outputs, if any, are in a proprietary format.

System #2: The TNC is called a Mobilinkd TNC1 (www.mobilinkd.com). That cost around \$45. The great thing about it is its bluetooth capabilities, meaning it will function with most any bluetooth device, such as an Android tablet or smartphone. There is a free app called APRSdroid that works well with google maps on these things.



APRS System #1: Garmin GPS (nuvi 350); Argent T3 mini in Altoids box and HT TH-25AT.

One word of wisdom here. Whatever system you decide to try, don't expect it to work first time around. As with all digital stuff, everything has to be perfect and done in proper order. The DIY ham is up to the task. If it can be done, we can do it, I say.



APRS System #1 with box open showing the T3 board and associated wiring. The Garmin nuvi has two USB inputs: one for power and the other for data.



APRS System #2: Mobilinkd TNC1, TH-25AT and Galaxy Tab 5. Some tablets like this one have GPS, the challenge is to input that data into the APRS program.

HOW DO WE PROMOTE BETTER OPERATING PRACTICES? - DAN ROMANCHIK, KB6NU

A lament that I often hear is that many amateur radio operators either don't seem to understand the importance of good operating practices or just don't care about them. Just this morning, a reader sent me an e-mail saying, "I think there are too many hams out there that don't know how to call a station on split frequency. It's amazing that we have so many dummies out there."

I wrote back, saying, "Maybe we need another type of Official Observer, called the Operating Observer. This group would note when operators aren't following good operating procedures and send people gentle reminders." Of course, as soon as I hit Send, I knew this wasn't a

very good idea. As my reader noted, this would be a thankless job, and chances are the poor operators would simply ignore the notices, anyway.

Even so, there must be some way to encourage good operating procedures. One effort to promote better operating procedures is the DX Code of Conduct (<http://www.dx-code.org/>). This is a list of 13 suggestions to make DX operation, particularly pileups, less chaotic. The website includes a small image that you're supposed to post to your website to show that you support the Code. While this is certainly a step in the right direction, I wish there was something that we could do to be more proactive in improving operating practices.

There is, of course, the ARRL Operating Manual. This publication is now in its tenth edition and is a valuable source of information about how to operate properly. The problem is only a fraction of the amateur radio operators on the air have a copy, much less read it.

Another attempt at promoting good operating practice is the ARRL's A-1 Operator's Club (<http://www.arrl.org/a-1-op>). While a noble effort, I think that this program really requires more promotion. In addition to being more aggressive about finding A-1 operators and bringing them into this "club," the ARRL should use it to promote better operation. Perhaps a series of videos with the A-1 Ops logo showing how to operate split or how to properly call CQ would help improve operating practices overall.

Talking about videos, I'd be surprised if there weren't already some YouTube videos that illustrate good operating practices. If you know of any, please e-mail me. It would be great to have a list of really good ones that I can send to people who want information on how to operate better.

What do you think? Do we need to be more proactive about encouraging hams to use good operating practices? If so, how do we go about it? What do you do to encourage better operating practices?

THE COMMUNICATOR is an informational publication for members of the Franklin County Amateur Radio Club. Officers: President: Al Woodhull, N1AW (n1aw@arrl.net), Vice President: Ron Niswander, K8HSF (reniswander@gmail.com), Treasurer: Howard Field, N1LUP (howfield@comcast.net), Secretary: Chris Myers, KB1NEK (cmyers1@verizon.net), Director: Belle Dyer, KB1NOG (bdyer58@mtdata.com), Director: Bruce Fuller KB1TLX, perkinsdowns@yahoo.com. This is your newsletter! Amateur radio information of general interest, club member project descriptions and doings, radio applications to other activities, corrections, or suggestions are all welcome. Individual submissions make for variety! We need more writers! Send submissions to Bob Solosko at w1srb@arrl.net.