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



FIRST CLASS MAIL



# THE COMMUNICATOR THE COMMUNICATOR

# September 2013

# **Upcoming Events**

Club Breakfast: Saturday Sep 14, 8 a.m.: Denny's, Greenfield E-Board meeting: Monday Sep 16, 6 p.m.: Greenfield High School

Meeting & Program: Monday Sep 16, 7:15 p.m.: Greenfield High School: Chet, N1XPT on D-Star

Food Bank Bike4Food: Saturday Sep 29, Public Service (tentative)

Club Breakfast: Saturday Oct 19, 8 a.m.: Denny's

E-Board meeting: Monday Oct 21, 6 p.m.: Greenfield High School

Meeting & Program: Monday Oct 21, 7:15 p.m.: Greenfield High School: Program TBA

Crop Walk - Shelburne Falls: Sun Oct 26, 1 p.m. for radio ops: Contact Phil Grant, N1YPS to ask

questions or volunteer.

**DUES are DUE now!** 

# September 2013

# **DUES ARE DUE NOW!**

Dues support the repeaters, the club activities and the Communicator.

General Adult - \$15/year

Family Group membership - \$18 /year

Repeater Patron donation - \$10.00 or more Suggested

You may pay for multiple years of membership.

# Mail dues to:

Franklin County Amateur Radio Club PO Box 773 Greenfield, MA 01302

or to

Howard Field 7 Laurel St. Shelburne Falls, MA 01370-1512

Make checks payable to **FCARC**.

Please include SASE if you wish to have your membership card or a receipt mailed to you.

# Calendar

### SEPTEMBER CLUB BREAKFAST

The September club breakfast will take place starting at 8 a.m. Saturday, September 14 at Denny's Pantry, 469 Bernardston Rd in Greenfield

### SEPTEMBER E-BOARD AND PROGRAM MEETING

The E-Board meets at 6 p.m. on September 16 at GHS, prior to the regular club meeting. Our first Program Meeting will be September 16 at 7:15 p.m. at GHS. Chet, N1XPT, has offered to give us a presentation on D-Star.

### **PUBLIC SERVICE: BIKE4FOOD**

The Western Massachusetts Food Bank is sponsoring a fund-raising bicycle tour event, Bike4Food, on Sunday September 29. They have asked us if we can help with communications. We are still talking with the Food Bank about their needs and how we can help. We will know more soon. If you are interested, contact Chris, KB1NEK, or AI, N1AW.

# Secretary's Report

# E-BOARD MEETING, MONDAY, AUGUST 19, 2013 - BOB DICKERMAN WA1QKT

- Bob WA1QKT needs to cancel trailer registration and return plate to registry
- Public Service:
  - The Food Bank of Western Mass is hosting "Will Bike for Food" fundraiser bike tour on Sept. 29, has asked us to help with communications. Multiple routes in CT river area, from Hatfield to Bernardston, Montague to Ashfield, ranging from 10 to 100 miles. Each rider raises \$250.00 minimum, each dollar raised will allow distribution of \$9.00 of food. We are considering this, Al N1AW may coordinate.

- o Crop Walk will be on Sunday, October 20 in Shelburne Falls this year.
- Franklin Land Trust fundraiser bike tour D2R2 (Deerfield Dirt Road Randonnee is Saturday, Aug. 24. We are planning 3 stations: one at headquarters in Deerfield, one at 10 Mile Bridge, and one at covered bridge in Guilford.
- Chris KB1NEK is investigating possible sharing of CERT/MRC storage space in Bernardston, will offer to clean/organize space in return for small space
- Upcoming program meeting topics:
  - Chet N1XPT offered to talk about D-STAR, a digital voice and data protocol sold by ICOM, at our first fall meeting, Monday Sept. 16 at 7:15 PM at GHS.
  - It was mentioned that perhaps we should ask Rich AB1RS to talk about U.S. railroad system
- Possible alternate club meeting places, if GHS construction should preclude use of GHS:
  - Hospital
  - Library
  - Police station
  - o GCC
- Chris KB1NEK will contact Cheryl at hospital to check status of ham radio station and operators there
- 440 Repeater seems to be malfunctioning again, Al N1AW and Bob WA1QKT were unable to communicate while in Greenfield recently
- NOBARC Hamfest August 25, Al plans to attend, may sell some club equipment
- Bob WA1QKT mentioned Phil N1YPS's intriguing idea that, now that trailer is gone, perhaps
  we will be able to rent a trailer for Field Day weekend, so that we can keep CW and SSB
  stations separated.
- Al said that he hopes to have Ron K8HSF, Belle KB1NOG, Cindy W1CAD, and perhaps Dick AA1XU and Barbara KB1NOI for Aug. 26 VE session; no examinees scheduled yet.

# News, Activities & Articles

### TWO METER BAND USE CHANGES

Our MARC standard simplex frequency for emergency use, 147.435, is in the middle of a range proposed to be used for repeater inputs. The information below was received on September 8. "At its annual meeting on August 24, New England Spectrum Management, the amateur radio repeater coordinator for Massachusetts, New Hampshire, Rhode Island, and Maine, announced a proposal to modify the 2m band plan to include new repeater channels with outputs from 146.41 to 146.49 and inputs 147.41 to 147.49. Also included was a test pair at 147.505 with a 146.505 input. In the near future, there will be a vote by the NESMC membership on this band plan. There is no doubt that some existing simplex users may be affected by this change.

"In order to gauge the impact of this change, NESMC has attempted to find as many simplex users as it can. We are also seeking additional input from the amateur community. If this interests you, you may find additional information about the change at http://www.nesmc.org/2013-2m.pdf. You may be interested in joining a discussion group set up for this purpose http://groups.yahoo.com/group/nesmc."

N1AW adds: my concern is that many local amateurs who are primarily interested in emergency service have depended upon others to program their radios and any change in the MARC frequency plan would have to be well publicized and could catch many people confused in an emergency. As FCARC's rep to NESMC I was invited to them meeting where this proposal was announced, but it conflicted with our support of the D2R2 event. But I believe I will have a vote when and if this proposal advances that far.

Related to this, there is another change in local frequencies that may affect us, and that many local amateurs may not be prepared for. The Deerfield 145.130 repeater has been designated as closed. The owner, Rich Strycharz, AB1RS, has indicated he has no objection to continued local use of this repeater for emergency communications, but the access method has been changed from PL 173.8 tone to DCS code 054 - not just a change of tone, but a change of the control method to one that may not be supported by older radios.

# 35TH ANNUAL BRIDGE OF FLOWERS CLASSIC RACES, SATURDAY AUGUST 10, 2013 – HOWARD FIELD. N1LUP

Shortly after 6:30 am I was joined by Chris (KB1NEK) and setup of the tent and table with the radio equipment was underway. As other personnel joined us the antennas were installed and the radios were tested for operation prior to the start of the race. The assignment list was adjusted and finalized as the operators moved out to their locations.

Mike (N1YMI), Dan (N1VFN) and Cindy (W1CAD) were setting up to relay the runner locations from the lead vehicles for the men and women. My wife Marlene passed the info to the race announcer.

At approximately 8:00 am Cathy (KB1SNA) did a call up of all operators to ensure everyone was in place and equipment was working properly prior to the 2 mile race. The short race started at approximately 8:15 am and was completed without any problems prior to the start of the 10K race. At 9:00 am the classic 10K race began. Traffic was handled back and forth between net control and the stations in the normal professional manner. The system worked using 147.435 Mz. simplex as the primary radio frequency, but we seemed to be having some difficulty with noise interference on Baker Ave. and possible Net Control transmitter being off frequency. A change in the Net Control radio seemed to be of some help. A call up of radio operators was completed approximately every 30 minutes. Operators passed lead runner and race runner information to net control while Mike (N1YMI) monitored it to pass info to the announcer.

The two races were run without any major problems. As the 10K race was drawing to a close the members that were located within town were relieved of their duties and gathered at the net control site on Baker Ave. to watch the last of the runners cross the finish line. Refreshments and Awards Ceremony followed on Deerfield Ave.

I would like to thank those that participated in the day's event. As usual we had a good turnout for the race event. I hope everyone had a good time and enjoyed the race. Cathy (KB1NSA) Net Control operator, Bruce (KB1TLX), GRAY (KB1AKU), Chet (N1XPT), Chris (K1SMY), Bob (WA1QKT), Cindy (W1CAD), Chris (KB1NEK), Carter (WA1TVS), Dan (N1VFN), and Mike (N1YMI).

### **DEERFIELD DIRT ROAD RANDONNEE**

A relatively small number of FCARC volunteers provided communication for the Franklin Land Trust's bicycle tour event on August 24th. More than 1200 cyclists followed routes of up to 120 miles over routes that stretched from Deerfield to Brattleboro and Marlboro VT, and as far west as Rowe and Charlemont. Our assignment was limited, but quite essential: we linked sites along the Green River in Colrain and Guilford VT with the event headquarters in Deerfield. There was no land line or cell phone service available at these remote sites, so we were not just a backup, we were the major communications link. As the ARRL slogan goes, "When all else fails... Amateur Radio." By all accounts the event sponsors were very glad for our help. We relayed many messages between Deerfield and the remote sites. It was a long day, we were on the air at our net control station from 7 a.m. to almost 5 p.m.

FCARC operators participating were Bruce, KB1TLX, Bob WA1QKT, Cathy KB1SNA, Bob W1SRB, and AI N1AW.















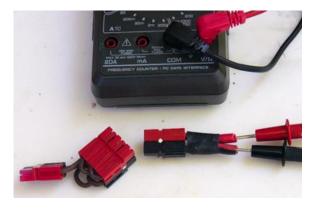


# POWER POLE TRICKS - AL WOODHULL N1AW

For keeping track of battery voltage while operating with solar power or in the field it's convenient to

be able to connect multimeter probes securely to the D.C. Supply line. Short stubs of small gauge insulated stranded wire connected to a pair of power poles make handy jacks for this – just jam the probes into the ends of the wire.

The photo also shows a homemade 4-way power pole adapter that allows me to connect an FT-817 transceiver and an LDG Auto Tuner to the battery line, with an additional connection point for the voltmeter.



### **TRIATHLON, SUNDAY AUGUST 4**

Sunday August 4, FCARC again provided communications for the Greenfield Triathlon again this year. Richard Stewart, KB1NOX, coordinated FCARC's participation and Al Woodhull, N1AW provided the photographs









### RADIO CHOICES FOR A NEW HAM, AL WOODHULL N1AW

A newly licensed ham asked me about buying a new radio, and after I answered him I thought maybe some of you would also be interested in what I had to say.

Regarding radios: any one of the major makes (Icom, Kenwood, Yaesu), any model not more than, say, 10 years old, will probably be satisfactory and you'll be able to find hams who can answer questions about a specific model, if not locally, on the Internet. You may find bargains on a used one.

For a handheld, 5 watts is typical for highest power output. That will generally be enough to talk through our Leyden 2 meter repeater from outdoors anywhere in Greenfield and probably most of the towns in the upper valley. Probably you'll also be able to talk through most of the 2 meter repeaters within 20 miles, which you can find via the website we told you about during the license class, http://rptr.amateur-radio.net

When you get into the hills it's more difficult - some places good, some not, depending upon local geography. Also a handheld will often work OK from within a building, but sometimes not. Inside a car a handheld may work with its attached antenna, but will probably work better with a magnetic-mount antenna on top of the car. For reliable mobile work you may want a "mobile" radio with 20 to 50 watts power. This will also work well as a base (home) radio, best with an outdoor antenna. Mobile radios need power supplies, a car battery in a car or a moderate sized 12 V supply in your house.

With a mobile radio you will probably be able to talk through our Leyden repeater from anywhere along I-91 from Putney down to Northampton, and from many places on the east side of the Connecticut River. From the Greenfield area you should be able to talk through Mt Tom and Mt Greylock repeaters and anything nearer.

Regarding specific radio models - I have rarely felt rich enough to spend a lot of money on my ham radio hobby, so most of the equipment I have is old and was obtained second hand. When I started working in Greenfield and was commuting from Amherst in 2007 I used a dual-band handheld radio that was then about 10 years old in my car with a magnetic mount to talk with people on the Leyden repeater while commuting back and forth. That old radio was an ADI, it had been a bargain when I bought it, but when it started to have serious problems (keys on the keypad were erratic or didn't work at all) and I tried to find help with it I found the manufacturer was no longer on the scene, there was nobody with a business of repairing these radios, and I could not get any advice from anyone on the Internet.

So, I decided to buy a new radio. Around that time a sizable group of new hams had graduated from an FCARC license class, and they had all purchased Yaesu FT-60 handhelds. I saw this model on sale from Ham Radio Outlet in New Hampshire at the biennial Boxboro ARRL Division Convention/Hamfest in 2010 I decided to buy one. I consulted with Chet, N1XPT, who I knew had one and had recommended it to the new hams. So I bought one, mostly because I knew a large number of people in FCARC, both new and experienced hams, used it. I figured I could get help if needed. Also, as I had quite a bit of experience myself, I thought I could master it and be useful in an emergency situation if newer amateurs had difficulty with their radios.

I bought my FT-60 without doing any comparisons with equivalent Icom or Kenwood radios. I'm not unhappy with my decision. It is still a current model, I still recommend it, a lot of people in the club still have the same model and I have found the decision a good one - I have needed help and I have given help on this model. But... the FT-60 has been on the market for a while, so I say now when people ask me about it, there might be another Yaesu, Kenwood, or Icom model that is comparable and better in some way.

That said, I'm not sure that any improvements that might be available would be useful - in our area the number of repeaters you might actually use is less than a dozen, so several hundred memory channels is more than I need. There are some new digital things, like D-Star, which, as far as I can tell, nobody nearby is using. I'm not even sure I really needed to spend the extra money for a dual band radio - we have a 440 MHz repeater in Greenfield, but it gets very little use. I did find more activity on 440 activity in Albuquerque and Tucson on the trip I took last winter - I think generally 440 is more used in urban areas.

My current mobile radio is a very old dual band Kenwood that I probably paid about \$50 or \$60 for at an estate sale. The main thing that sets it off from newer radios is it only has about 20 memory channels. That's a bit of a nuisance when I'm traveling, because I can't have all the channels I might want on a trip to NJ and MD pre-programmed. But in most other ways it is satisfactory.

You asked about Chinese radios. I have a Baofeng UV-3R. It's a dual band radio, it fits in a pocket and seems to work well. Its power level is low, high power is 2 watts, and so I can't always get into a repeater well - even at my house, about a mile from our repeater, inside the house if I am in the wrong place I get reports of a noisy (weak) signal. The battery is like a triple-size cell phone battery. The specification for the battery charge life is 8 hours at 5-5-90 (I think that means 5% talking, 5% listening (unsquelched) and 90% silent (squelched) monitoring). It is very cheap, I think under \$100. Now here's the bottom line on this Baofeng: I probably never would have bought it. I won it in a raffle at a hamfest last summer, so it cost me \$1. I am happy with it and bring it with me on hikes.

One thing I would worry about with a Chinese radio is what happens when it needs service. Maybe the model will still be current 5 years from now, maybe there will be somebody in the US who services them and has access to parts. On the other hand if the radio is cheap enough maybe it won't be a big deal to throw it away. Professional service is not cheap, either.

I hope this is helpful.

# TAKING A DOSE OF MY OWN MEDICINE - DAN ROMANCHIK, KB6NU

Last week, I wrote a blog post on preventive maintenance for one of my writing clients.

Afterwards, I decided to take a dose of my own medicine and do a little preventive maintenance around the shack. I started with the Astron RS-35M, which provides the DC power that runs HF transceiver and my VHF/UHF transceiver in my shack. I had started noticing a few little things, such as the voltage adjustment being a little fussy, that I wanted to correct before the supply failed on me.

After removing the cover, I vacuumed all the dust out of the supply. The RS-35M wasn't very dirty, but even so, getting the dirt out of a piece of equipment is probably the first thing you'll want to do when performing preventive maintenance. Dirt impedes air flow. That can lead to higher operating temperatures, and as the lab manager that I interviewed for my blog post said, "Heat kills."

Not only should you vacuum any dust out of a cabinet, you should also clean the fan filters, if your gear has them. Dusty filters prevent air from flowing smoothly through equipment, and that means the fans don't cool as well as they should.

Once that was done, I did a visual inspection. One thing that you want to look for are components that look like they're getting too hot. Another thing to look for is evidence of arcing. Whatever is causing the overheating or arcing will eventually cause a unit to fail. Fortunately, I found neither.

Next, I checked to see that the components mounted to the enclosure were securely screwed down. In the RS-35M, the transformer, the bridge rectifier, and an electrolytic are mounted to the enclosure. Oddly enough, the bridge rectifier was quite loose, so I tightened it down. Also loose were the output terminals. I tightened these down as well.

Finally, I squirted a little cleaner and lube into the voltage adjustment pot and worked it back and forth. That seemed to do the job. That pot now works smoothly and cleanly.

I put the cover back on, reconnected the power cable, and got back to making QSOs. It should be good for another couple of years.

THE COMMUNICATOR is an informational publication for members of the Franklin County Amateur Radio Club. Officers: President: Chris

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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.