

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

FIRST CLASS MAIL



THE COMMUNICATOR THE COMMUNICATOR

October 2017

Upcoming Events

- Oct 10 Tue 6:00 pm License Class, GCC
- Oct 12 Thu 6:00 pm License Class, GCC
- Oct 14 Sat 8:00 am Breakfast, Denny's Pantry; 10:00 am Franklin County Amateur Radio Emergency Communications group, GCC Hammond Studio
- Oct 15 Sun 12:00 pm Crop Walk, Greenfield
- Oct 16 Mon 6:00 pm E-Board; 7:15 pm General Meeting at GCC Hammond Studio.
- Oct 17 Tue 6:00 pm License Class, GCC
- Oct 19 Thu 6:00 pm License Class, GCC
- Oct 21 Sat 10:00 am – 3:00 pm License Class & VE Session, GCC
- Nov 18 Sat 8:00 am Breakfast, Denny's Pantry; 10 am Fox Hunt (Franklin County Emergency

- Communications group invited), meet at Cherry Rum parking lot, north end
- Nov 20 Mon 6:00 pm E-Board; 7:15 pm General Meeting ,GCC Hammond Studio
 - Nov 27 Mon 7:00 pm VE exams, Northfield Unitarian Church

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 a receipt mailed to you.

Public Service Event: Crop Walk, Greenfield, Sunday October 15.



AI, N1AW

CROP Hunger Walks are community events sponsored by Church World Service and organized by religious groups, businesses, schools and others to raise funds to end hunger in the U.S. and around the world. Locally, this will be the 31st year of the Franklin County Crop Walk, which is held in a different community every year.

The 2017 event will take place in Greenfield on Sunday October 15th, starting at 2:30 pm. Walkers will start at the Second Congregational Church (near Greenfield Town Hall). They will have a choice of a short (1.8 mile), medium (3.3 mile) or long (5.1 mile) route. Unlike the very athletic events we have supported in August and September this event will have young and old individuals as well as family groups participating.

The FCARC has a long history of helping with Crop Walks. Richard, KB1NOX will coordinate this year. Please contact him by e-mail (stwricha@aol.com) or phone ([413-863-2657](tel:413-863-2657)) to

volunteer. Of course we will have a signup list at the October breakfast, but as that is on the day before we need to know how many volunteers will be available earlier than that.

See the <https://www.crophungerwalk.org/> website for more information on Crop Walks all around the country, and see <https://www.facebook.com/pg/Franklin-County-CROP-Hunger-Walk-210126759043349/> for the Franklin County event.

E-board meeting Monday, September 18, 2017 – Chris Myers KB1NEK

1. Ron outlined organization of the club's plan to provide communications around the course of the Bike for Food event on Sunday, Sept. 24.

2. Al and Bob Dickerman gave a progress report on repairs to the 2 meter repeater on Frizzell Hill, in Leyden. Now that the damaged antenna has been replaced, they are concentrating on restoring the former power level from the transmitter. The temporary replacement will only transmit at a 20 watt setting when 100% duty cycle is required, as in typical repeater operations.

At the Boxboro hamfest earlier in the summer, a representative of Yaesu presented information on an upgraded version of its DR-1X equipment, which is the version we are now using in Leyden. The company says the newer model, called the DR-2X, will be offered soon in deals that accept an old DR-1X as a trade in. The DR-2X will supposedly handle a full 50 watts continuously, although that has not yet been promised in writing. It adds other features as well, mostly when operating in the C4FM (System Fusion) digital mode. Yaesu is offering a reduced price on the new equipment until the end of September.

Al, who had the discussion with Yaesu at Boxboro, has learned that some of the recent firmware updates for the DR-1X have not been working smoothly for customers, so he recommends we wait before considering an upgrade to the DR-2X until Yaesu works out all the bugs.

Meanwhile Bob Dickerman has made enough progress repairing the old Mitrek equipment that he thinks it is ready to run at least 40 watts for a 100% duty cycle. Al mentioned that because the Mitrek uses crystal control, its receiver may work better than on a synthesizer controlled machine, such as the DR-1X, since there are none of the spurious emissions generated by synthesizers. In theory, at least, the VFO's spurious emissions might penetrate to the receiver, and partially desensitize it.

The consensus of the meeting was to recommend putting the Mitrek back up on Frizzell Hill, removing the DR-1X, and returning it to use at the Greenfield Water storage site.

Al and Bob are also working on repairing and reconditioning the old controller used with the Mitrek. Bob saw evidence of damage that may have been caused by a nearby lightning strike. He suggested we put some effort into lightning protection for the whole repeater set-up in Leyden.

3. On other business, Al explained that because he finished production of last month's Communicator, he discovered his mailing list did not coincide with Jeanne's. Al created a new list more complete than either his or Jeanne's original and shared a copy with Jeanne. Separately, Al has updated the Members page on the website using information on dues-paid members that Howard sent him.

4. Rich Stewart offered to coordinate club's participation in the Crop Walk, which will take place on Sunday, October 15 in Greenfield.

After the e-board meeting adjourned, the full membership meeting took up a topic being discussed at the ARRL national level - how best to encourage newly licensed hams to actively take up the hobby. The two strategies given the most consideration are mentoring and developing a program of continuing education.

Emergency Communications

As some readers are aware, a group of club members have been meeting after many of the monthly breakfasts to discuss the potential use of amateur radio communications in disasters. At our meeting in August, Aaron, KC1CXX, brought the parts for participants to make a quick and dirty 6 meter ground plane antenna, possibly useful for communicating with operators working with MEMA.

Monday, Sept. 25, Rick Roderick, the president of the ARRL, sent a message to all members to alert them of the need for radio operators to assist the Red Cross in its efforts to help residents of Puerto Rico suffering from the disaster caused by Hurricane Maria. According to the letter, this is the first time in the 75 year relationship between the ARRL and the Red Cross that so many operators have been requested for one disaster.

The letter also requested donations to restore the league's fund for purchasing Ham Aid equipment, which has been heavily used in the last month to help response to Hurricanes Harvey (Texas), Irma (Florida), and now Maria.

The same day I read Rick Roderick's letter to league members, I also received an After Action Report on the shelter drill where 10 of us participated back in March. For me the highlight of the AAR was the statement that, "The radio operators did a great job of keeping an open line of communications when other forms of communications were not available."

In fact, while the Mohawk Trail High School that day did have working telephone and internet connections, these connections were not available to the gym area where the shelter was set up. We not only had operators in the shelter, but also at the Emergency Operations Center used by the town of Buckland, as well as at the East Building at Greenfield Community College.

For the last two years the Regional Emergency Preparedness Committee for Franklin County has been developing a Multi Agency Coordinating System to assist in disasters that might affect many towns at the same time. If a such a system were to be activated, it would need to set up an operating center, and the current first choice is the same East Building at GCC where we set up an operating position during the March shelter drill.

I can send a copy of the AAR to anyone who would like to read it. I also invite anyone interested in learning more about radio communications in emergencies to come to our monthly club breakfast at Denny's then join the discussion in the Hammond Studio in the East Building.

Chris Myers, KB1NEK
ARES coordinator for Franklin County

News, Activities & Articles

Our Activities calendar has been updated for the 2017-2018 club year. It is available on line by clicking the "Activities" tab on the www.fcarc.org web page. A PDF version is available for download as <http://www.fcarc.org/Files/FCARCcalendar1718.pdf> . The Activities page may be updated from

time to time, so be sure to consult it for changes.

Repeater Notes AI, N1AW

On the day after our last club meeting AI and Bob went to the Leyden repeater site with two spare Motorola Mitrek units, both of which Bob had serviced. We wanted to put one back on the transmitter side of the repeater (the receiver unit seemed to be OK). The one that we had removed after the lightning strike in June now works, but its power output level is unsteady. We tried the other one, which Bob had repaired after an earlier round of difficulties. (Bob now has proper documentation for these units, a big help with maintenance). When we put it in place it put out a steady power level. We adjusted it for 40 watts output, which is conservative.

We had a concern whether the controller for the Leyden repeater had been affected by lightning, and initially it seemed that our ability to use the 136.5 Hz subaudible PL tone had been lost. But we left the repeater running, everything else seemed OK. Later AI checked our documentation and found that there is a small additional circuit board used for PL tone encoding and decoding. This is not part of the CAT-1000 repeater controller. And it turned out to be a problem we had seen three years ago, when our old 440 repeater on Rocky Mountain was having problems. Fortunately at the time we bought a spare replacement for the decoder-encoder board. The next day this was installed. So now the Leyden repeater is back, operating with the original Motorola Mitrek r.f. units and the controller with all of its functions.

As this is being written the Leyden repeater has been functioning normally for a week. We have a new antenna and a repaired transmitter. We have heard from a club member who lives at some distance who previously reported some problems with accessing the repeater. He says it is now better. We would appreciate more reports.

WILL BIKE 4 FOOD SUCCESSFUL EVENT

The seventh annual Will Bike 4 Food fund raising event on September 24th was a success with participating cyclists raising \$130,000 for the Food Bank of Western Massachusetts. Communications support for this event was provided by AI N1AW, Chris KB1NEK, Joe KB1WVO, Justin KC1HEG, Carter WA1TVS, Rich KB1NOX, Jeanne KC1DCQ, Ron K8HSF and Erika Laforme.

FCARC provided communications support along the 100 mile route in areas where cell phone service is spotty, and at the two most remote water stops. The location of net control was the same as last year, adjacent to the Food Bank's volunteer coordinator on the Hatfield Library lawn. There were no situations this year requiring our assistance even though the weather was unusually hot for the end of September.

We once again utilized the club's FT-8800 dual channel capability, with the Leyden repeater used to communicate with stations in the northern areas while the Deerfield repeater was used to communicate with stations in the southwest areas, thus providing good practice on dual channel operation. We did have issues with communications in the southwest area which will require some review and problem solving to see if we can improve communications in this area for next year's event. It also came to our attention that we had not requested permission from the Deerfield repeater's owner to use it in this special event. It is of course always good practice to obtain permission from a repeater's owner for this purpose as it will be taken out of normal use for the duration of the event.

As always, these events provide good practice for event and emergency communications as well as verification that equipment is operational. The food bank expressed thanks for our event support.

Amateur Radio's Force of Fifty Answers the Red Cross Call in Puerto Rico

09/26/2017 <http://www.arrl.org/news/amateur-radio-s-force-of-fifty-answers-the-red-cross-call-in-puerto-rico>

Fifty of the nation's most accomplished Amateur Radio operators responded within 24 hours to the call of the American Red Cross to deploy to Puerto Rico and provide emergency communications. At the behest of Red Cross, ARRL rallied the US Amateur Radio community to provide up to 25 two-person teams of highly qualified hams. The group's principal mission will be to move health-and-welfare information from the island back to the US mainland, where that data will be entered in the Red Cross "[Safe & Well](#)" website.

The group will deploy the middle of this week and remain on the island for up to 3 weeks. ARRL will equip each two-person team with a modern digital HF transceiver, special software, a dipole antenna, a power supply and all the connecting cables, fitted in a rugged waterproof container. In addition, ARRL is sending a number of small, 2,000-W portable generators as well as solar-powered battery chargers of the variety the US military uses on extended deployments. The hams and their equipment will be sent to Red Cross shelters extending from San Juan to the western end of the island.

"This generous outpouring of response represents the finest qualities of the Amateur Radio community," ARRL CEO Tom Gallagher, NY2RF, said. "These individuals are dropping whatever they are doing now, heading off to an extended hardship-duty assignment, and offering their special talents to Americans who have been cut off from their families, living amid widespread destruction and without electrical power since Hurricane Maria struck the Caribbean region last week."

ARRL's Emergency Preparedness Manager Mike Corey, K11U, said this was the first time in the nearly 75-year relationship between ARRL and the American Red Cross that such a request for assistance had been made. "Hurricane Maria has devastated the island's communications infrastructure," Corey said. "Without electricity and telephone, and with most of the cell sites out of service, millions of Americans are cut off from communicating. Shelters are unable to reach local emergency services. And, people cannot check on the welfare of their loved ones. The situation is dire."

How You Can Help

In a letter to all ARRL members, ARRL President Rick Roderick, K5UR, asked for contributions to ARRL's [Ham Aid](#) fund. "Equipment has been flying out the door since Hurricane Harvey struck the US mainland," he emphasized. "From meeting requirements in aid of Hurricane Irma victims in the US Virgin Islands and Florida, our store of Ham Aid kits has been depleted."

ARRL's Ham Aid program loans Amateur Radio equipment kits to established Amateur Radio Emergency Service (ARES®) groups and partner agencies during disaster responses, in order to establish Amateur Radio communication support. Ham Aid is supported by donations from individuals and corporations, including many of our ham radio industry partners.

ARRL has previously staged Ham Aid equipment in Texas, and in the last few weeks, ARRL has supplied kits to Florida, the US Virgin Islands, and Puerto Rico. With our Ham Aid inventory depleted, your donation is needed now. Contributions to Ham Aid are 100% tax deductible.

To make a donation online, go to the [ARRL donation form](#) and select "Ham Aid." To donate by mail,

print a donation form, and mail it with your check payable to ARRL, noting "Ham Aid" on the memo line of your check. Mail to ARRL, 225 Main St, Newington, CT 06111 USA.

Upcoming Tech class to get licensed

The Club is going to run a class for folks who want to get a Technician class amateur radio license. We are looking at four evenings over two weeks and a Saturday morning followed by an exam in the afternoon. The cost will be the book (about \$25). If you know anyone who would like to have some support to get their license please have them contact Jeanne Dodge KC1DCQ, dodge@gcc.mass.edu. The class will be at GCC and Jeanne, KC1DCQ is the contact person there. A list will be started for those who are interested. If you know of anyone who would like to take the class, they can register thru this link.

<http://greenfieldcc.3dcartstores.com/search.asp?keyword=radio+license&search=GO>

Annual Fox Hunt

We will have our annual fox hunt on Saturday, November 12th, after the club breakfast. All are invited to come; if you know anyone who would like to join us they are most welcome. If you have never done a fox hunt, there will be folks with experience to pair up with. Participants in the Emergency Communications Group are invited to participate. Start location: Cherry Rum parking area, north end (please note the change in the start location!!!)

THE COMMUNICATOR is an informational publication for members of the Franklin County Amateur Radio Club. Officers: President: Al Woodhull, N1AW (n1an@arrl.net), Vice President: Joe Henefield, KB1WVO (joehenefield@comcast.net), Treasurer: Howard Field, N1LUP(howfield@comcast.net), Secretary; Chris Myers, KB1NEK(camyers1@verizon.net), Director: Belle Dyer, KB1NOG (bdyer58@mtdata.com), Director: Ron Niswander, K8HSF(reniswander@gmail.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: Jeanne A. Dodge, KC1DCQ(j.anndodge@gmail.com).