

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



FIRST CLASS MAIL



THE COMMUNICATOR
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November 2018

Upcoming Events

- Nov 10 Sat 8:00 am Breakfast, Denny's Pantry
- Nov 10 Sat 10:00 am Fox Hunt, Franklin County Amateur Radio Emergency group members invited, fox hunt should be in the parking lot behind Denny's Pantry.
- Nov 12 Mon 6:00 pm E-Board; 7:15 pm General Meeting, GCC Hammond Studio
- Nov 22 Thanksgiving
- Nov 26 Mon VE exams 7:00 pm, **GCC East Building Room 110**
- Dec 8 Sat 8:00 am Breakfast, Denny's Pantry; 10 am

Some Additional pictures from WILL BIKE 4 FOOD (Article is found below)



October 2018

Secretary's Report

Elected members present: Aaron, Al, Howard, Joe, Ron and Chris (recording secretary)

1. Anne gave up-date on search for provider for new T-shirts and sweat shirts. She said she had called four companies, and recommends Silverscreen Design. They charge a \$62.50 set up fee, which will be necessary to change the logo so that it no longer indicates the formerly used frequency of our 440 repeater in Greenfield. Joe moved that the club spend the \$62.50, and if eventually more shirts are sold than the minimum, the excess received be returned to the treasury. The motion passed.
2. Ron reported that the number of members helping the Bike for Food event this year was less than in the past. He mentioned that the organizers have no provision for a sweep vehicle nor for making sure every participant returns safely.
3. The Montague recreation department has already contacted us asking for coverage at the Saw Mill River Race on New Year's day.
4. Howard was asked to check with the Ashfield, Buckland, Shelburne Senior Center for the use of its main room for our annual holiday party. We will ask for Dec. 10, but accept Dec. 3 as an alternative.

Membership Meeting

Greg Bennet, KC1CIC, gave a presentation via teleconference on the topic of digital messaging over amateur radio channels, including Winlink and NBEMS. He said such messages are now part of the ARES strategic plan. There is now even a digital side to the league's National Traffic System (NTS). It is NTSD. Using Winlink, it is possible to leave a message any time, day or night, in a recipient's Winlink mailbox, or, via the regular internet, on someone's e-mail address.

Some users of Winlink (eg. MARS) prefer to use it without any link through the regular internet.

Other ARES groups, such as on Cape Cod prefer to use NBEMS, which only operates station to station, and has no mail box provision.

[News, Activities & Articles](#)

Help Wanted:

Newsletter editor, would you like to help the club the the newsletter. Please contact Aaron Addison at kc1cxx@arrl.net to volunteer.



Anne, N1YL, has arranged for a new source of FCARC shirts and hats. Designs can be seen online and items can also be ordered online:

<https://beta.inksoft.com/fcarc/shop/home>.

You can have your order shipped to you. If you order by November 27th you can also have it shipped to Anne and pick it from her at the December club breakfast (Saturday December 8th) or get it from her after the breakfast.

Don't miss your chance to purchase gear with your name, call sign, and our new logo designed by Silver Screen Design! Place your order **NO LATER** than November 27th. You can choose to put your name and call sign in the location and style as shown for an additional \$8. All products are embroidered. Extended sizes up to 5XL available on selected products.

Hotspots warm up digital radio

By Erik Sherman (KC1JQN)

Specially built equipment and technologies allow digitally encoded conversations to occur. That includes routing the conversations over single repeaters, over pairs or radio-linked repeaters, or through repeaters that are connected to the Internet.

Digital mode exists for voice communications, not data transfer as you'd do with something like PSK-31 or JT65. Instead, the approach is similar to using voice over Internet protocol, or VoIP, when speaking with someone via Skype. You can talk with people all over the world, no matter

what the propagation conditions are.

You've probably heard of some digital mode radio technologies. Three of the most popular are Fusion, which is Yaesu's proprietary version; D-Star, which ICOM uses but was created by the Japan Amateur Radio League; and DMR, used by Motorola under the MOTOTRBO and developed in Europe as a communications standard.

One drawback is that even if you have an HT unit that supports a digital mode, you need access to a digital-supporting repeater that has a working Internet connection. Otherwise, the digital support can't work.

However, there is a relatively new solution: a digital mode hotspot, like the one FCARC member Ted Schiff (K3FEC) brought to the monthly breakfast in September. Here's a picture of his setup on the breakfast table. (Ketchup is optional.)



Ted is on the right with the TYT HT (also pictured are Carter McDonald, Erica LaForme, and a unidentified elbow). In the center of the table is his cell phone. To the left, just above the pepper

shaker, is the hotspot, this one from ZUM and called a ZUMspot, plugged into a battery. There are other manufacturers as well. We'll call the type of device a digital hotspot; you'll see why in a second.

The ZUMspot acts as a go-between. Its UHF antenna communicates with the HT. The ZUMspot also uses Wi-Fi to communicate with the phone, which must have its Wi-Fi hotspot capability turned on. (Hence the "digital hotspot," because the same term is used two different ways.)

The ZUMspot is based on a Raspberry Pi programmable computer. The device runs software that can translate between either DMR, D-Star, Fusion, or a combination of two or three of them, depending on the model and version, and Internet communications, much as a digital mode repeater would.

The digital hotspot receives a transmission from the HT (which must support the digital mode in question), translates the protocols, and then sends it through the cell phone's Internet data connection to the servers online where the conversations actually take place.

Ted let us listen to a conversation he had with someone he knew in England. The sound quality was crisp with no hint of QRN or QRM. After a few minutes, he ended the conversation.

One warning Ted offered was that using a digital hotspot regularly can burn through a lot of data and become costly if you don't manage things. You'll also need to configure the digital hotspot using a computer and USB cable, so changing the digital hotspot to work with whatever Wi-Fi hotspot that might be nearby and save money on your cell plan isn't the most practical plan.

WB4F writeup

Ron K8HSF

WILL BIKE 4 FOOD SUCCESSFUL EVENT

The eighth annual Will Bike 4 Food fund raising event on September 30th was a success with participating cyclists raising \$157,000 for the Food Bank of Western Massachusetts. The event has grown each year, with the entry of 400 cyclists this year. The cyclists chose to ride one of four routes through the northern Pioneer Valley area (10, 25, 50 or 100 mile routes) Since Will Bike 4 Food began in 2011, the event has raised more than \$701,000, providing the equivalent of more than 2 million meals to families in need throughout western Massachusetts.

FCARC provided communications support along the 100 mile route in areas where cell phone service is spotty. Communications support for this event was provided by Al W1AW, Anne N1YL, Erik KC1JQN, Joe KB1WVO, Erika KC1IJJ, Rich KB1NOX, and Ron K8HSF. 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, with the weather being very cooperative for the end of September.



Due to issues encountered last year in the southern Whately area, we were again set to utilize the clubs FT-8800 dual channel capability to utilize both the Leyden and the Deerfield repeaters. However, W1AW's mobile rig connected well to the Leyden repeater from the southern Whately location, thus not requiring the use of Deerfield. As always, these events provide good practice for event and emergency communications as well as verification that equipment is operational. The food bank could utilize us in other areas of support if more club members were willing to participate. This is an annual event in late September so please keep it in mind for next year. The food bank expressed thanks for our event support.

Fall Radio Class

This fall Jeanne Dodge KC1DCQ taught a class Amateur radio class, for people wanting to get their Technician radio license. Nine people took the class. We had 7 people get the Technician class license and 2 get the General. Among the 7 new Technicians were 3 young men in their early teens.

She had several guest instructors, and the FCARC would like to thank.

Erik Sherman KC1JQN
Keith T. Rowley KU1N
Anne Kring N1YL

I was also pleased to be able to participate. It was quite a privilege for all of us to be able to guide these people into the large hobby of amateur radio. We hope to see each of them soon.

We would also like to thank Jeffrey Bail, from the Pioneer Valley VE Team (<http://pvvet.org>) for helping with the license exams and getting the students FCC call signs in record time.

A class for the General license is planned for spring of 2019.

Aaron KC1CXX



Our Upcoming meeting on Nov 12 Mon

For the November meeting we made several attempts to get a guest speaker but were unable to schedule anyone. Instead we will welcome our new members and make plans for 2019. With our holiday party in December this will be the last meeting of 2018.

Aaron KC1CXX

THE COMMUNICATOR is an informational publication for members of the Franklin County Amateur Radio Club. Officers: President: Aaron Addison (kc1cxx@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 (bdyer582@juno.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).

Back issues of the Communcicator are online at <http://www.fcarc.org/commun.htm>