

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

FIRST CLASS MAIL



THE COMMUNICATOR

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Upcoming Events

- Club Breakfast: Saturday, Apr 15, 8:00 a.m.: Denny's, Greenfield and Franklin County Amateur Radio Emergency Communications, April 15, 10:00 am; Hammond Studio, GCC
- Apr 17 Mon Patriots Day, Boston Marathon
- E-Board Meeting: Monday, Apr 24, 6:00 p.m. and Program Meeting: Monday, Apr 24, 7:15 p.m.: GCC Hammond Studio Topic: Field Day Planning
- Club Breakfast: Saturday, May 13, 8:00 a.m.: Denny's, Greenfield and Franklin County Amateur Radio Emergency Communications, May 13, 10:00 am; Hammond Studio, GCC
- E-Board meeting: Monday, May 15, 7:00 pm: GCC Hammond Studio
- VE License Test: Monday, May 22, 7:00 p.m.: Northfield Unitarian Church
- Club Picnic: Saturday, May (Date uncertain, time, & location TBA)

Secretary's Report

E-BOARD AND PROGRAM MEETING

Monday, March 20, 2017 AT GCC, CHRIS MYERS KB1NEK

The main discussion of the evening was focused on the club's several repeater problems.

1. The Telewave antenna that we planned to buy was sold to someone else by the time we thought we were ready. Al suggested, and others agreed, that our best bet is simply to replace the antenna there with one just like it. We already know that professional climbers are paid \$80 an hour and that they work in pairs. The owners of radio station WPVQ plan to have work done on the tower in the late spring or early summer. If we have a new antenna in hand when the climbers come to do that work, we can hope they will have time to change our antenna and split the cost of the day's work.

2. On March 3, Al and Keith discovered that the Town of Greenfield had extended the tower at the water department site where we have 2m and a 70 m repeaters. While raising the height of the tower, the town's engineers removed our 2m antenna from its position at the top, and put it on a side mount at about the same height it was. They also removed the small antenna we had been using for receiving, saying it was not properly protected against lightning. Subsequently Al and Keith persuaded the engineers to retune our old 2m duplexer so we can once again transmit and receive on the same 2m antenna. One section of that duplexer was seized up so it could not be adjusted. The engineer by-passed that section, leaving the duplexer operating at less than its full potential, but nevertheless, working better than it had been.

The town also gave us a rack for our equipment, since they no longer have a need for it. The town sent us a bill for \$250, which includes some of the engineers' labor, plus some coaxial cable and connectors. Later, at the full members meeting, we voted to pay that bill.

For future meeting programs someone suggested trying again to invite Cathy Colman

We agreed to have club picnic again at the elementary school in Leyden. Al will ask permission for May 27.

On the subject of Field Day, Jeanne suggested we set up some kind of hospitality tent for serving food instead of cramming that activity into the bottom of the tower with two radio stations, as we have in the past.

The presentation for the main meeting was by Bob Solosko on the subject of computerized antenna modeling

Franklin County Amateur Radio Emergency Communications Shelter Drill at Mohawk Regional High School, March 25

41 people from many disciplines took part in a five hour shelter drill in Buckland on Saturday, March 25. Ten of those were members of the FCARC, or, in the case of Erika LaFrome, a potential member. We operated radio at three different locations: the shelter itself, the Buckland EOC, and at GCC, where we simulated the kind of communications that would be required if a Multi Agency Coordinating Center is activated for Franklin County.

While we had our problems getting everything to work as planned, the experience was useful. Operating in a setting with many emergency first responders gave us good exposure that will hopefully be a boost to our credibility in the future.



“Jeanne KC1DCQ, Bob WA1QKT, Erica, and Gary KC1BHX worked at GCC. Jeanne did most radio ops, Bob tried to debug DPW link, and Erica and Gary put up antennas and logged radio communications”. There were lots of challenges trying to get the DPW radio at GCC to work right. Bob troubleshooted and kept trying, below is the Antenna that he kept experimenting with and Bob is asking Jeanne to try transmitting.



Greenfield and Leydon Repeater Report, AI N1AW

Greenfield Repeaters Report

With all the attention we have been giving to replacement of the antenna on our 2 meter repeater in Leyden, we had not been paying a lot of attention to our Greenfield repeaters. In part this was because of lack of access, the Greenfield repeaters are located in the small building at the Greenfield water facility on Rocky Mountain, downhill from Poets Seat tower. The large underground water tank there underwent major repairs starting in late summer, and access was restricted. Supposedly we were going to be allowed access in November, but the work is still not complete. So we limped along without dealing with issues at our repeaters – the 448.875 MHz repeater still has some sensitivity problems – we think the old duplexer is not adequate. The 147.120 repeater was working with separate transmit and receive antennas because the duplexer had not been tuned for the new frequency pair.

A day or two after a tornado caused extensive damage in the towns of Conway and Goshen we found that our Greenfield 2 meter repeater was not responding. We feared that our repeater had been damaged by the same storm. As it turned out, our repeater was not off the air because of storm damage. Keith KU1N and Anne KC1CRS went to Rocky Mountain and found that our two meter antenna at the top of the tower was missing. Not only that, at least five new antennas had been placed on the tower. The first picture shows the tower when our antennas were new, in October 2014. The 2 meter antenna is on top and the 70 cm antenna is side-mounted.



The second photo shows what Keith and Anne found on February 27, 2017. Note that there is no antenna at the top of the tower.

Mystery solved: the next day Keith and Al N1AW met with representatives of the Greenfield DPU and Fire Department at Rocky Mountain. The Fire Department was installing new equipment. They had increased the height of the tower to accommodate new antennas. Our antennas were still there, but the one originally at the top was moved to the side, at the same height as the original top of the tower. But our 2 meter repeater was not working because the professional communications technicians disapproved of the jury-rigged temporary 2 meter transmitting antenna we had installed low on the tower. We had done this in order to get the new repeater going on a frequency for which we had not yet retuned the duplexer. But not only was the temporary antenna not physically well-mounted, it also had no lightning protection. We thought that would be OK at only 10 feet up on a 40 foot tower, but we admitted it was not good enough.

As reported briefly in the March issue of this newsletter our 147.120 repeater was back on the air. Early in March technicians hired by the Greenfield Fire Department installed some new cable for interior connections at the Water Department hut, and used a very fancy (and expensive instrument) to readjust the old 2 meter duplexer to our new 147.720 MHz in, 147.120 MHz out frequencies. All equipment was moved to the rack donated to us by the Fire Department, and a heavy ground cable was installed to connect that rack to the common ground shared by all the other communications equipment in the hut.

Both the 147.120 VHF and 448.875 UHF repeaters are new Yaesu DR-1X units, configured to work in digital modes as well as conventional analogue FM. If a signal using one of the digital modes is received the repeated output will use that mode. More information on using digital modes will be posted soon on our website repeaters page (<http://www.fcrc.org/repeaters.htm>) and you can read more about the Yaesu repeater

features at (<https://systemfusion.yaesu.com/>). On the UHF side we are still experiencing interference from a powerful digital repeater in Connecticut. We are looking into finding a new frequency pair to use on UHF. On-site maintenance of the repeaters is still a little difficult; work on the water tank and the area around is still not complete, but we have been told that we should soon be able to have normal access to the equipment shelter at the water facility.

Temporary Home Needed for Old Repeater

The Greenfield Water Department would like us to get our old 440 MHz repeater out of the small building at the Rocky Mountain underground reservoir. It is a metal cabinet about 6' high, bulky and heavy. Al would prefer not to have it in his garage. Is anybody willing to store it for us for a while? Although we haven't yet specifically discussed what to do with it Al does not foresee ever putting it back in service as a repeater and expects we will try to sell it or its components to help finance other projects. Please contact Al N1AW if you can help.

Leyden Repeater Report

Our 2 meter repeater on Frizzell Hill in Leyden has a problem, which we have known about and discussed in a lot of detail for quite a few months now. In the February Communicator we described the solution we thought we had – a new but unused commercial quality antenna which we could get at a bargain price. We were waiting to get approval from the commercial FM station that owns the tower on Frizzell Hill when we learned that the antenna we had been planning on was no longer available.

We are not quite back to zero, because in the process of discussing the problem which began last fall we acquired specifications and prices and opinions about many alternatives. The engineer for the FM station has told us that he will have professional climbers doing some work on the tower lights when the weather gets warm, we will decide in the next month or two what to get and take advantage of the presence of professional help for installation when available.

News, Activities & Articles

Results of February FCARC VE Session – AL WOODHULL N1AW

For our February 27th Volunteer Examiner (VE) license exam session we had one candidate, Justin Norman of Greenfield. About a week later his new callsign was posted on the FCC site: KC1HEG

MTARA Flea Market, March 11, 2017

We took advantage again of the generous offer of the MTARA of a free table to local radio clubs. We were very favorably placed right across the aisle from the display of raffle prizes and the raffle ticket sales table. Chris KB1NEK, Joe KB1WVO, and AL N1AW arrived early for setup and took turns staffing the table. Rich KB1NOX also brought some items to sell and helped us keep an eye on things.

We sold over \$100 worth of surplus club equipment, mostly small items donated by various members. We also sold some "boat anchor" items on behalf of the Greenfield High School Amateur Radio Club. We also had time to talk with many people from other clubs, who visited our table.

Check out what club member Bob Solosko has coming up. Can we say Field Trip?

Two Days in Manhattan

New York Street Photography
by Bob Solosko

April 2, 2017 through April 29, 2017

Burnett Gallery at the Jones Library
43 Amity Street, Amherst, MA



Opening Reception during the Amherst Arts Night Plus,
Thursday, April 6th, 5:00 PM - 8:00 PM.

FRANKLIN COUNTY AMATEUR RADIO CLUB TEE SHIRT ORDER

Name: _____ Contact Information Phone: _____

Email: _____

PRODUCT	DESCRIPTION	SIZE	6	10	14	18	2X	3X	NUMBER	Cost/item	Subtotal
			8	12	16	20					
G800	Gildan® DryBlend® 5.6 oz.50/50 T-Shirt						NA	NA		13.75	
G800	Gildan® DryBlend® 5.6 oz.50/50 T-Shirt	2XL/3XL					2XL	3XL		17.25	
G800	Gildan® DryBlend® 5.6 oz.50/50 T-Shirt	5XL							5XL	22.75	
G830	Gildan® DryBlend® 5.6 oz.50/50 POCKET T						NA	NA		17.50	
G830	Gildan® DryBlend® 5.6 oz.50/50 POCKET T	2XL/3XL					2XL	3XL		21.50	
G180	Gildan® Blend™ 8 oz.50/50 Fleece Crew						NA	NA		21.25	
G180	Gildan® Blend™ 8 oz.50/50 Fleece Crew	2XL/3XL					2XL	3XL		24.00	

			6	10	14	18						
			-	-	-	-						
			8	12	16	20						
PRODUCT	DESCRIPTION	SIZE	S	M	L	XL	2XL	3XL	NUMBER	Cost/item	Subtotal	
G180	Gildan® Blend™ 8 oz.50/50 Fleece Crew	5XL							5XL	30.00		
G185	Gildan® Blend™ 8 oz.50/50 Hood						NA	NA		30.25		
G185	Gildan® Blend™ 8 oz.50/50 Hood	2XL/3XL					2XL	3XL		34.00		
G185	Gildan® Blend™ 8 oz.50/50 Hood	5XL							5XL	40.75		
G186	Gildan® Blend™ 8 oz. 50/50 Full-Zip						NA	NA		39.25		
G186	Gildan® Blend™ 8 oz.50/50 Full-Zip	2XL/3XL					2XL	3XL		44.00		
G186	Gildan® Blend™ 8 oz.50/50 Full-Zip	5XL							5XL	48.00		
G500	COTTON Gildan®™ 5.3 oz. T-Shirt	cotton					NA	NA		13.50		

ORDER TOTAL: _____ **Checks**
payable to FCARC

Goal: to submit order by May 16th to have shirts by field day

Please note larger shirts have higher price.

Please note that if we order enough shirts to get lower prices profits will go to FCARC.

Please Contact Anne Kring (KC1CRS) amk320@comcast.net (preferred) or 4135224024 with questions.

Feel free to mail orders with payment to Anne Kring PO Box 1216 Greenfield MA 01302-1216

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 (camyers1@verizon.net), Director: Belle Dyer, KB1NOG (bdyer582@juno.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: Jeanne A. Dodge, KC1DCQ (j.anndodge@gmail.com).