

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

FIRST CLASS MAIL



THE COMMUNICATOR THE COMMUNICATOR

Summer 2017

Upcoming Events

- Jul 15 Sat 8:00 am Breakfast at Denny's, Greenfield
- Jul 17 Mon 7:00 pm E-Board at Hammond Studio, GCC
- Aug 5 Sat 8:00 am Breakfast @Denny's
- Triathlon: Sunday August 6, 7 a.m.: Nash's Mill Rd., Greenfield
- Bridge of Flowers Race: Saturday August 12, 7 a.m.: Shelburne Falls
- Club Breakfast: Saturday August 15, 8 a.m.: Denny's, Greenfield
- Franklin Land Trust Bicycle Tour (D2R2): Saturday Aug 19, All day: Deerfield – Vermont
- E-Board meeting: Monday August 21, 7 p.m.: Plan for next year, GCC
- VE license test: Monday August 28, 7 P.M.; Northfield Unitarian Church

Calendar

PUBLIC SERVICE ACTIVITIES

August is our big month for public service events.

- The **Greenfield Triathlon** takes place **Sunday August 6th**. Our support is very important for this event. A signup list will be available at the July 15th and Aug. 5th breakfast at Denny's or contact Richard Stewart by e-mail, stwricha@aol.com, or phone him at 413-863-2657 to volunteer. Event info is at: <http://www.greenfield-triathlon.com>.
- The **Bridge of Flowers 10K Road Race** is next, on **Saturday August 12th**. The annual Bridge of Flowers race will take place Saturday, August 12th in Shelburne Falls. We need volunteer radio operators to provide communications around the course to help insure runner safety. Chris Myers, KB1NEK, will coordinate the club's effort. A net control station will be set up at 6:30 AM, on Bridge St, across the street from the Greenfield Savings Bank. Volunteer radio operators should arrive at 7, in order to find parking space nearby.
- ... and later in the month we'll help with the Franklin Land Trust's **Deerfield Dirt Road Randonee**, a bicycle tour event on **August 19th**. Contact Al Woodhull N1AW, coordinator, aswoodhull@yahoo.com.

FCARC will again be providing communications for the Franklin Land Trust D2R2 bicycle tour. In this tour, cyclists can choose from routes that are 180 Km, 160 Km, 115 Km, 100 Km, 40 miles or 20 miles in length through Massachusetts and Vermont. See <http://www.franklinlandtrust.org/d2r2> for more information. Unlike other races that FCARC supports, this is an all-day event. FCARC will set up communications between the starting/ending location in Deerfield and at several critical check points along the route. These check points are where lunch is provided to the riders and are at locations where there is no cell phone coverage. The communications that we provided between these locations and the race starting/ending location is the only communications available. We need several people at each of these locations and for morning, afternoon or all day shifts. Dinner, a beer and beer glass are provided to each volunteers.

September meeting

At the ARRL Division Summit meeting last week Al invited Ray Lajoie, KB1LRL, to visit our September meeting if he is able. SA at the meeting Ray had nomination papers to run for ARRL Western Massachusetts Section Manager. He is doing this with the blessing of the incumbent, Ed Emco, W1KT, who is not standing for re-election.

Secretary's Report

E-BOARD AND PROGRAM MEETING MONDAY, JUNE 19 2016, CHRIS MYERS KB1NEK

Jeanne announced that GCC is set to list the club's technician course in its October calendar. In early July, an announcement can go on its web site. For the record, Jeanne will be the instructor, as she is a member of the GCC faculty. The question of how best to provide study books was raised. Al is still trying to settle on the list of instructors, which will probably at least include him and Belle.

Another question raised is what really motivates people to want to study for an amateur radio license test. Somebody mentioned a club in Texas using an experiment with a radio on a balloon as a way to stimulate scientific curiosity. While we need a better idea of what will motivate people locally, Bruce suggested sending out a questionnaire to hams to find out what they think.

At the emergency communications meeting after the last club breakfast, Aaron reported that the Shutesbury EOC, of which he is a member, plans to use 6 meter amateur communication as part of its back up strategy. He offered to make kits for people to assemble a 6 m antenna for the next emergency communications group meeting.

Al reported that the club's repeater in Leyden is off the air, following a thunderstorm that brought down tree limbs and cut electric power for a while. Some of the equipment belonging to the FM radio station was also knocked out, although its main transmitter is still functioning. Al had time to check some of the club's equipment and found the controller working, but the transmitter not putting out full power. Perhaps the final stage of the transmitter was damaged. As of the meeting time, the club's repeater had been shut down for further examination.

At the main membership meeting, elections were held for a slate of club officers, including Vice President, Joe Henefield, KB1WVO, Treasurer, Howard Field, N1LUP, and Director, Ron Niswander, K8HSF. No new nominations were proposed from the floor. A motion was made and seconded to approve the entire slate. The vote was unanimously in favor.

News, Activities & Articles

VE SESSION IN NORTHFIELD,

Our VE team will hold an amateur radio license exam session on the fourth Monday of August, August 28th. Details on the website at <http://www.fcrc.org/venews.htm>

Al will be in the White Mountains the last week of August, Ron will coordinate the VE session.

FIELD DAY, JUNE 24-25, 2017:

GOTA

This year's GOTA station was terrific. In spite of the high winds the third shot of the spud gun gave the G5RV antenna the location desired. It was hung higher than previous years closer

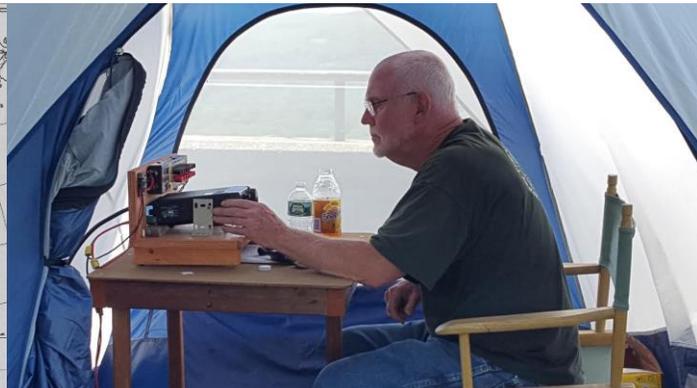
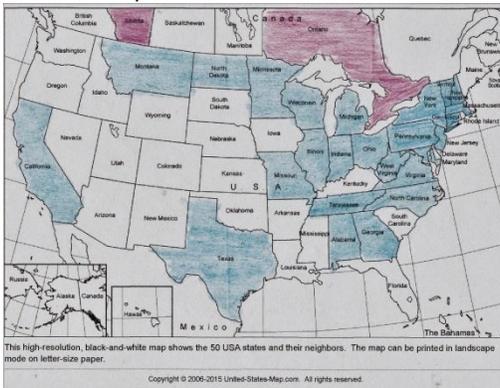
to Poet Seat tower suspended above the rock face of the cliff. Without the 20 m antenna on the side of the tower, given the change in antenna position, and the 6 m station outside of the tower base, there was very little interference. Using the same ICOM radio two years in a row allowed the GOTA coach increased familiarity with the radio. As the enthusiastic but less experienced GOTA coach, I found having so many experienced ham operators close by provided for breaks and meant every question that was asked by visitors got answered. We had 10 operators this year operate under my supervision on the GOTA station. Two operators were licensed technicians KC1DCQ (30 contacts) and KB1NOX (20 contacts) who both earned bonus points. Another club member, Erika, who is working on her technician license made 13 contacts. We also had one 12-year-old youth participant. Two new college graduates got on the air while passing through town from a music concert where Morse code



had been introduced in the music. A drummer from Texas shared that the rhythm of CW was interesting to him due to his musical background. Several other guests from western Massachusetts came both days and tried their hand at the



radio. The GOTA station made 79 contacts reaching 25 states and 3 Canadian sections or 2 provinces using SSB on 20 and 40 meters. The excitement of new operators was palpable and made field day a lot of fun! We are looking forward to seeing several of our visitors in our license class this fall. KC1CRS, Anne June 2017



The upper bands of HF were dead. 6 Meters should have had signals from all over the country, but not this year. Phil Grant and myself were attempting to work 6 meters, but the band was so very dead. I believe there were only a total of 11 contacts on 6 meters.

After speaking with friends from other clubs, they too experienced dead bands, Some friends said just about everything above 20 meters was dead. Some New England clubs experienced some success in the 17 and 15 meter bands but not at all what they had hoped for. several friends I spoke with over the phone from Pittsfield Mass, Manchester NH, and Nashua NH, as well as Townshend Vermont all said 12, 10 and 6 were dead. They had never seen such dead air on Field Day.

Richard KB1NOX

Notes from Field Day 2017 and Other Radio Reminiscences

I am a latecomer to radio operating. But I was a young discoverer of shortwave listening, which I discovered in my grandfather's attic when I discovered a furniture-grade Philco radio about four feet high. With a piece of copper wire stretched from that third floor attic to a lilac tree line, I was taken from AM radio to 80 meters. I took my first license exam in 1991. In those days you still had to demonstrate that you could copy CW at five words-per-minute to get your novice ticket. Living in Pelham at the time I had plenty of room for a Beveridge antenna, not to mention dipoles of any length or configuration. A chance encounter at the 1991 Amherst Model Railroad club annual exposition at the Big E provided me with a military transceiver. I spent considerable time running what I thought were adequate long-wire antennas without much success beyond fickle reception. I didn't know enough at the time to know what I needed to do to, or invest the time to learn. Work and family finally managed to overwhelm free time, and eventually I returned the boat anchor to the donor.

I had planned to be at Poet's Seat before the 9am setup time to watch the sun rise and shed light on Greenfield. However, I awoke early that morning discommoded and as a result did not arrive at Poet's Seat until noon.

Joe KB1WVO



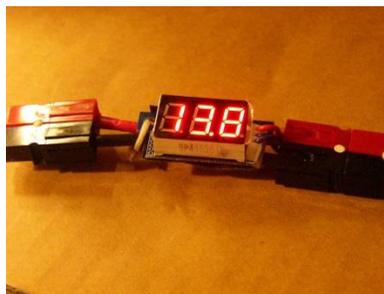


PowerPole In-line Voltmeter

AI, N1AW

Sometimes I want to monitor voltage - for instance, when operating portable from a battery. Temporary connection of a voltmeter can be clumsy, alligator clips can come loose easily.

Inexpensive miniature digital readouts are available for \$10 a hamfest dealer. I made a pairs of PowerPoles and leads from the miniature circuit the black lead to the negative



voltmeters with 3 digit or \$12 - I bought several from short jumper between two soldered the blue and red board to the positive side and side. I used short pieces of to hold the voltmeter in place.

Survey

We are running a Technician licensing class this fall. As we are planning the class, it would be helpful if folks would be willing to tell us some information about why you got into Ham Radio. Please copy and paste the survey below into an email and send it to Ron Niswander <reniswander@gmail.com>

Please indicate your reason(s) for studying and taking the test for the FCC Amateur Ham License. On the following list mark up to 8 reasons. No. 1 being the primary reason and secondary reasons Nos. 2, 3, 4, 5, 6, 7, 8

- | | |
|---|--|
| <input type="checkbox"/> DX ing | <input type="checkbox"/> Contesting |
| <input type="checkbox"/> Emergency Communications | <input type="checkbox"/> Public Service |
| <input type="checkbox"/> Experimenting | <input type="checkbox"/> Kit Building |
| <input type="checkbox"/> Fox Hunting | <input type="checkbox"/> Satellite Tracking |
| <input type="checkbox"/> Space Ship Communication | <input type="checkbox"/> SOTA (Summits On the Air) |
| <input type="checkbox"/> POTA (Parks On The Air) | <input type="checkbox"/> Moon Bounce |
| <input type="checkbox"/> Collecting | <input type="checkbox"/> Certificates |
| <input type="checkbox"/> OSL Cards | <input type="checkbox"/> Travel Communications |
| <input type="checkbox"/> Hands On Construction | <input type="checkbox"/> "Rag Chew" |
| <input type="checkbox"/> Other _____ | |

Repeater Update

AI, N1AW

On June 19th a short but exciting thunderstorm passed over Leyden. At my house there was thunder and lightning very close. Our repeater, located about a mile from my house, went off the air. I was able to get access very quickly. The WPVQ FM station appeared to be still on the air, but because our repeater was off the air I called Josh, the station engineer, to ask if he had any information. Josh realized that his communication link from Greenfield to the transmitter site was not working, and I met him there. Unfortunately something serious happened to our repeater. The antenna, receiver and power supply are OK, but the transmitter is not working.

With Field Day coming up we felt having the Leyden repeater active was important, and after consultation with others at our meeting that evening I decided to take our Greenfield 70cm repeater off the air and reinstall it at Leyden (this is one of our new Yaesu repeaters, usable on either 2 meters or 70cm bands). For local coverage in Greenfield we still have the 147.120 MHz repeater. Also, interference from a high powered repeater in Connecticut has made our assigned 448.875 MHz difficult to use - we probably need to find a new frequency there.

As this report is being written a little over a week after Field Day we are still running the Yaesu repeater in Leyden. Its power output is a little less than the damaged equipment and it does not have the capabilities of the sophisticated controller with synthesized voice messages. But it works. We hope that we will have more to report before our new club year begins in September.

ARRL News: Amateur License Structure

AI, N1AW

Joe, WB1VHO (FCARC Vice-President Elect,) and I attended an ARRL New England Division Cabinet Meeting on Saturday July 1st. These meetings are called by and presided over by ARRL New England Division Director Tom Frenaye twice yearly, a few weeks before the July and January ARRL Board of Directors meetings. Club Presidents are invited to attend; the FCARC has been regularly represented at these meetings in recent years.

A topic that the ARRL Board has been discussing is dissatisfaction with the current license structure. There are currently three classes of amateur radio license available: Technician, General, and Extra. (There are also two classes no longer issued, Novice and Advanced, holders of these can renew). There is a great deal of dissatisfaction about the Technician license as an entry-level license - it does not offer access to the voice or digital modes on frequencies normally usable for long-distance communications, yet the license examination requires a much higher level of technical knowledge than was required for the no longer issued Novice license. The ARRL created an Entry Level License Committee at the July 2106 Board Meeting and a final report is scheduled for the July 2017 meeting. This will presumably be followed by a request to the FCC for changes. Tom Frenaye is chairman of the committee, and there was a vigorous discussion of this at the July 1st Cabinet Meeting. Tom invited participants to send him additional comments, and I took him up on this.

Here are the comments I sent to Tom Frenaye:

Part 1. Privileges of current Technician license.

There are two problems:

- recruitment into the amateur radio hobby
- retention in the hobby (and of ARRL membership)

In the meeting I expressed my opinion is that there is a factor that affects both of these. This is lack of access to high frequency voice modes at the entry level.

The Cabinet Meeting occurred a week after the 2017 Field Day. My club had, only a week earlier, a very successful GOTA (Get On The Air) event as part of our Field Day. I observed excitement as people who had not experience high frequency ham radio operation picked up a microphone and made contact with other Field Day stations far away. Several of our participants were young, or young adults, others were mature adults, a couple were holders of Technician licenses who could not operate on HF voice modes with their current licenses.

My point is that this excitement came from what is possibly the most popular frequency/mode combination among hams who are serious enough to become long-term members of the ARRL. This mode is not available to Technician licensees. It would seem that if we want to recruit new people to the hobby or encourage new licensees to use their licenses, access to voice modes on the high frequency bands should be one of the privileges available at the entry level.

I am not saying there are not other aspects and newer modes that can attract newcomers to amateur radio, but digital modes and microwave experimentation are activities of a minority of current amateurs. We should certainly encourage current amateurs with such interests to make their activities visible to potential recruits to our hobby. But we should also ask the FCC to give newcomers access to a popular mode that is widely used and easily demonstrated by many current amateurs.

The current Technician license does give access to a mode that is possibly more widely used than HF voice modes, that is VHF FM via repeater. Access is less expensive and easier than HF voice modes, but there are two problems. One is that repeaters are much less used than in the past, many are silent much of the time. The other is that the majority of users do nothing else. Back in the 1950s when the one-year Novice license was a popular entry point into amateur radio, there was concern among older amateurs about the "Novice Accent" that was perceived to be developing as inexperienced new hams communicated mostly with other inexperienced new hams. This resulted in an article in QST which the ARRL reprinted and distributed to all new Novices. The problem was somewhat self-correcting, in that the original Novice license was non-renewable. So within a year a new ham would either leave the hobby or graduate to a higher class license. Unfortunately the easiest upward path was to the Technician license, which then as now was something of a dead end itself.

Making HF voice operation available at the entry level is especially important because it is so widely used by current General and higher class licensees. Therefore it is the mode potential newcomers are most likely to encounter and the mode most likely to spark interest in amateur radio. But since entry level licensees now have limited HF CW privileges I don't see any reason why they shouldn't also have access to other HF digital modes. Among other things, modern commercial equipment makes use of digital modes easy. I think amateur radio would be shooting itself in the foot to encourage new amateurs to purchase equipment with capabilities they could not use.

Part 2. Need for a new entry level license.

I passed the Novice class written exam when I was 14 years old, in 9th grade. Morse code was the hurdle for me, I could have passed the written test at age 12. Over the years I have helped many people prepare for entry level licenses, Novice and more recently Technician and higher levels. The current Technician level license is much more difficult than the old Novice exam. I think I would have had a hard time with the current Technician test at 12.

Although I would like to see privileges for HF voice operation added for current Technician licensees, I also believe we should have a new entry level license. It should provide access to HF voice and digital modes, as well as useful access to VHF – by this I mean some part of the 6 meter, 2 meter, and 70 cm bands. In general, an entry level license should be restrictive

enough with regard to privileges that there will be an incentive to move on to a higher level. But the restrictions on the entry level license should not preclude interaction with higher license class amateurs, including use of repeaters.

In my view the technical knowledge required for the entry-level exam should be linked to the privilege level – the goal should be to understand what one needs to understand to follow the rules. One thing that was mentioned in the meeting yesterday is an example: if an entry level operator is not allowed to be the control operator of a repeater or an auxiliary station there would not be a need to test on relevant rules or the technical background needed to understand these rules. Another example, if power levels were restricted to levels below the thresholds where r.f. power evaluation is required questions about this could be omitted from the pool. (I would further suggest the limit be on output power, so as not to require evaluation of loss in the feedline).

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Albert S. Woodhull

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 (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: Jeanne A. Dodge, KC1DCQ (j.anndodge@gmail.com).