

April 2022

# NEW ENGLAND BEACON

Issue 1

*ARRL Division Newsletter*



**INFORM**

**RECRUIT**

**RETAIN**

## 100 DAY PLAN COMPLETE

The appointment of Dan Norman, N0HF, as Assistant Director for Youth Outreach was the final element to complete the pledge of AB1OC's 100-Day Plan. Dan joins the slate of other ADs for New England: Anita Kemmerer, AB1QB, AD for Mentoring & Ham Development, Cory Golob, KUIU, AD for Emergency Communications & Public Service and Rob Leiden, K1UI, AD for Spectrum Use & Protection. Additionally, Director Kemmerer has reached out to Board Members and Senior ARRL Leadership to create common ground for action, taken steps to improve communication and collaboration by hosting a town hall with a planned cabinet meeting coming up this month and has shown a commitment to clubs and groups by having attended six club meetings in the first quarter.



# DIRECTOR'S UPDATE FOR 1Q-2022

*by Fred Kemmerer, AB1OC*

It has been about 3 months since I became the ARRL New England Division Director. My focus has been on the following areas since January:

- Building a relationship with and begin working with the ARRL Board Members, CEO, and Staff at ARRL Headquarters
- Setting up communications processes with our division
- Appointing four Assistant Directors to work on important issues and helping them to get their teams up and running
- Working with the ARRL Foundation to get the new ARRL Club Grant Program ready to roll out
- Enhancing focus within our division on legislation and regulations that impact Amateur Radio

All of this work would not be possible without the team of people who are working with me on these and other initiatives. We call ourselves the New England Director, Vice Director, Assistant Director (DVA) Team. I'd like to introduce you to the DVA Team:

- Phil Temples, K9HI – New England Division Vice Director
- Cory Golob, KU1U – Assistant Director, Emergency Communications and Public Service Activities
- Rob Leiden, K1UI – Assistant Director, Spectrum Protection and Use
- Anita Kemmerer, AB1QB – Assistant Director, Mentoring and Ham Development
- Dan Norman, N0HF – Assistant Director, Youth Outreach and STEM Learning

I feel very fortunate to have this group of dedicated people working with me to serve New England Hams.

## *ARRL Update*

David Minster, ARRL CEO has been hard at work filling key positions at ARRL HQ. David's recent hires include:

- Steve Goodgame, K5ATA – Manager Education and Learning
- Josh Johnston, KE5MHV – Director of Emergency Management

I've had the opportunity to spend some time with Steve and Josh and they are both top-notch picks. They bring innovative thinking to their respective roles and they both are extremely enthusiastic and hard workers.

A number of important things got accomplished at the ARRL Board of Directors Meeting in January. You can find more about the details in the Board Meeting Notes [here](#). The highlights include:

- Creation of a new ARRL Worldwide Digital Contest
- Modification of the 70+ Lifetime Membership Program to make it more accessible
- Adoption of the Clean Signal Initiative, a program to improve the quality of transmitted signals
- Selection of an external investment management firm and creation of a new Investment Oversight Committee
- Election of ARRL Officers including a new Treasurer, John Sager WJ7S
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## *Club Recognitions*

The ARRL Board of Directors recognizes clubs for long-standing ARRL affiliation and service to the Amateur Radio community. Along with the ARRL Board of Directors, I am pleased to recognize the following New England Clubs for their many years of ARRL affiliation and service:

- **Androscoggin Amateur Radio Club** – 70 Years
- **Ellsworth Amateur Wireless Association** – 60 Years
- **Meriden Amateur Radio Club** – 75 Years
- **Providence Radio Association** – 101 Years
- **Southeastern MA Amateur Radio Association** – 75 Years

You can read about some of the many accomplishments of these clubs via the links above. We will be presenting each of these clubs with a plaque recognizing their long service and contributions at upcoming Hamfests and Club meetings.

## Communications

The DVA Team believes that effective, 2-way communications are an essential part of serving members and Hams in New England. Our communications approach consists of three parts:

- Quarterly Division Cabinet Meetings with Club Presidents, Section Managers and Field Staff Members, and other leaders
- Triannual (every 4 months) Division Town Hall Meetings with all ARRL Members in New England
- Frequent attendance at Club Meetings (at least 6 times a quarter for each DVA team member)

We held our first Cabinet Meeting on January 8th (see what was discussed [here](#)). Our next Cabinet Meeting is scheduled for April 16th. We are inviting members of the HQ Staff to these meetings so that they can share information on what they are doing and receive feedback directly from division leaders.

We held our first Town Hall Meeting on February 16th. Attendance was very good with over 200 in attendance. We provided an update on ARRL and New England Division activities and answered some 75 questions from the folks who attended. You can see what was discussed including a recording of the event [here](#). We are planning to hold our next Town Hall Meeting in June.



AB1OC Presentation at K1USN, March 5, 2022

I've had a lot of fun attending some 11 club meetings so far this quarter. Our DVA team has also been attending many club meetings. We all find these meetings very helpful for keeping in touch with what Hams are doing in New England. We also want to be available to hear concerns and ideas that we can help with.

A special thanks to our Vice Director Phil, K9HI, who has built and continuously provides content for our division website. You can sign up to receive updates when we publish articles and information here by sharing your email address in the sidebar.

## Assistant Director Teams

I heard concerns about many issues from ARRL Members and Hams in New England during the past 6 months. I have appointed four Assistant Directors (ADs) with the charter to bring people together to address some of the top concerns. Our initial Assistant Directors are:

- Cory Golob, KUIU – Assistant Director, Emergency Communications and Public Service Activities
- Rob Leiden, KIUI – Assistant Director, Spectrum Protection and Use
- Anita Kemmerer, AB1QB – Assistant Director, Mentoring and Ham Development
- Dan Norman, N0HF – Assistant Director, Youth Outreach and STEM Learning

You can learn more about our Assistant Directors [here](#) and [here](#).

Our ADs have formed groups of folks interested in working together to solve problems and promote programs in their focus areas. Some of the work that is going on with the AD teams includes:

- Sharing successful activities, programs, and tools (check out the AD pages on [nediv.arrl.org](http://nediv.arrl.org))
- Promoting activities and programs across the division
- Encourage collaboration to create new and strengthen existing division-wide programs

Are you interested in being part of one or more of these teams? Check out the associated groups.io or contact our ADs at:

Focus Area	Assistant Director	eMail	groups.io
Emergency Communications and Public Service Activities	Cory Golob, KU1U	kulu@nediv.arrl.org	ne-ecaps
Spectrum Protection and Use Including RFI Resolution	Rob Leiden, KIUI	klui@nediv.arrl.org	spectrum-protection-and-use
Mentoring and Ham Development	Anita Kemmerer, AB1QB	ab1qb@nediv.arrl.org	ne-ham-dev
Youth Outreach and STEM Learning	Dan Norman, N0HF	n0hf@nediv.arrl.org	nediv-yso
Hamfests			



L-R: Fred Kemmerer, AB1OC, with Horace Clark, N1HC, at HAM-CON

I have been enjoying attending Hamfests and Conventions during the past few months. I've attended Hamcation in Florida in February, HAM-CON (the VT State Convention) in March, and attended the Maine State Convention in April. In addition to doing ARRL Forums and providing updates at these events, I've very much enjoyed talking with Hams to understand what is on their minds and to hear about projects and ideas to improve Amateur Radio and the ARRL.

The ARRL provides a Hamfest and Convention sanctioning program. The benefits of ARRL Sanctioning include:

- Your event will be listed online and in QST
- Sanctioned ARRL Conventions will be listed in the ARRL Letter
- You will receive ARRL prize certificates for use at your event

It's a good idea to apply for sanctioning early as this process can help you to avoid scheduling conflicts by letting other groups know that you are holding your event on a specific date(s).

## *Club Grant Program*

As many of you probably know, I have a passion for all that Amateur Radio Clubs provide. Clubs are the cornerstone of mentoring, many Amateur Radio activities, youth outreach projects, and many other important parts of Amateur Radio.

I made it a point to take on a role in the planning work for the forthcoming ARRL Club Grant Program. I have been working as part of a team of ARRL and ARRL Foundation directors and leaders to define how the Club Grant Program will work. The work is proceeding well and we are planning to begin rolling out the details of the program in April. Does your club have a project that would benefit the Amateur Radio community and the public as well as your club? You might want to consider applying for an ARRL Club grant.

We are also looking for volunteers to serve as Club Mentors and Club Coaches. You can learn more about these volunteer roles [here](#).

## *Focus on Legislation*

With help from vigilant members in our division and Section Managers and State Government Liaisons in New England Sections, we have been working with Hams in New England to address pending legislation that would negatively impact Amateur Radio.

We are seeing bills emerge in several states in New England which are intended to protect people from health effects due to RF exposure from 5G commercial wireless networks. The most recent situation occurred with New Hampshire HB1644. This bill was written so broadly that it would have prohibited nearly all transmit antennas in residential areas. The bill would also establish a public registry where anyone who felt they were experiencing negative health effects due to RF exposure from nearby transmit antennas of any type could publicly identify the location of such antennas. With help from NH Section Manager Peter Stohrer, K1PJS, and NH State Government Liaison Bill Nelson, KA1PTW, we were able to mobilize NH Hams to file comments and testify at a hearing on this bill. At present, HB1644 has been sent back to Committee for further study and revision.

We have held meetings with the Section Managers and State Government Liaisons in New England to make them aware of the potential for similar bills to emerge in other states and to set up a process to share information and coordinate efforts to address such legislation going forward.

### *ABIOC's Ham Radio Activities*

It's been a challenge during the past few months to find time to participate in the Amateur Radio activities that I enjoy. I've continued to support the Nashua Area Radio Society as Program Chairperson where I'm responsible for finding speakers for the club's monthly Membership Meetings and Tech Night training sessions. I've also been part of a team that taught both Technical and General License Training classes where we helped a total of 16 people earn their Amateur Radio License or upgrade.



I've continued to be a mentor and ground station for the ARISS program. The school that I've been working with recently as their ARISS Mentor is located in Sussex County, NJ. They made contact with the ISS in February. I had the opportunity to join the group on contact day – it was an amazing experience!

I also had the opportunity to serve as the ARISS ground station for a group of scouts at a Jamboree in Victoria, Australia who made contact with astronaut Mark VandeHei, KG5GNP, on the ISS. You can read more about this contact here. I really enjoy working with young people around the world in this way to bring an amazing experience to them via Amateur Radio.

In between all of this, I've hosted some new Hams at our station to help them to get on the air and try various modes and bands. I've also been making contacts via Amateur Satellites and have been doing some meteor scatter and digital contacts on the 6m band. The 10 and 12-meter bands have been showing some decent DX activity on SSB and CW recently and I've had some fun there as well.

I hope to see you soon at a Hamfest, Club Meeting, Town Hall Meeting, or some other event in the near future.

All the Best and 73,

Fred Kemmerer, AB1OC  
ARRL New England Division Director  
eMail: [abloc@arrl.org](mailto:abloc@arrl.org)



## “THE CONSORTIUM”—COVERING THE HAM RADIO BASICS

*by Phil Temples, K9HI*

Like the successful “Ham Bootcamp” program sponsored by the Nashua Area Radio Society, The Consortium was formed out of a need to mentor new amateurs in the Providence, Rhode Island area. And like Ham Bootcamp, it, too has had to adapt during the COVID-19 pandemic.



Bob Beaudet, W1YRC, and Jim Johnson, K1GND, formed the idea for The Consortium back in 2007. “Listening to the Scituate 146.76 repeater over time, I noticed that several newer hams who were talking about antennas, matching networks, transmission lines, grounding methods, mobile noise remedies and dozens of other common issues were making lots of mistakes in their theory and assumptions. They didn’t even understand most of the terms they were using.”

Since the start of the pandemic, K1GND and W1YRC have switched to weekly electronic tutorials. “Until the restrictions permit us to resume sessions of the Consortium [...], Jim K1GND and I are providing electronic material to continue providing Basic Radio material in order to remedially provide knowledge that we all missed working our way up to getting our license.”

They eagerly look forward to resuming in-person meetings at the Asia Grille in Lincoln, Rhode Island as soon as it is safe to do so.

For more information about the Consortium, visit <http://w1ddd.org/consortium.html> or check out The Consortium article in the April, 2018 issue of QST.

# ASSISTANT DIRECTOR UPDATES

## RFI Troubleshooting Continues to Upgrade

*Rob Leiden, K1UI, Assistant Director for Spectrum Utilization & Protection*

The New England Division Radio Frequency Interference (RFI) Troubleshooting Guide and Section RFI Teams continue to expand. The web pages now include even more RFI information for hams.

The spectrum-protection-and-use iogroup continues to develop the web-based process. A team training page, an RFI remediation techniques page and a page listing known RFI sources have been added. A page that will allow clicking on a New England map to find power utility contacts is being constructed. Five of seven New England sections have RFI Teams and the rest are actively recruiting. A starter set of RFI Team equipment has been obtained. Initial use is planned for later this month. The EMA team is already involved in a case with team- owned equipment.

A forum at the New England / Hudson Division Hamxposition in August in Marlborough, MA will feature both the cooperation between Eversource and the New England Division and the process for getting hams help in resolving their RFI issues.

## New England Net Directory & Public Service Events Form

*Cory Golob, KU1U, Assistant Director for Emergency Communications & Public Service*

A Net Directory for On-Air Emergency Communication related nets in New England is now available by visiting <https://nediv.arrrl.org/new-england-net-directory/>

One link can be used to submit Net Information and the other link contains the final listing of nets which includes the Name of the Net, function of the net (Traffic Handling, ARES, SKYWARN, etc.), frequency information as well as days and times the net is conducted. If you notice a net is missing or needs to be updated, please submit information.

You can also use a form to promote a [Public Service Event](#) or Activity which will then be posted on the NEDIV ARRL website for others to see.

If you wish to be part of EMCOMM and Public Service related discussions, please join the [NE-ECAPS Groups.io](#). We have been meeting once per month via Zoom.

# ASSISTANT DIRECTOR UPDATES

## New Ham Mentoring Program Coming Up on May 14th

Anita Kemmerer, *AB1QB*, *Assistant Director for Mentoring & New Ham Development*

Are you a newly licensed Technician, or a General or Extra and have never been on the air or built a station? Are you a prospective ham but would like to learn more about Amateur Radio activities? Are you an experienced Ham who would like to help your club enhance its mentoring programs? The Nashua Area Radio Society will be holding another online Ham Bootcamp on Saturday, May 14th, 2022 from 10:00 am to 6:00 pm Eastern time. Ham Bootcamp will be held via Zoom web conferencing.

The morning sessions will be focused on VHF and UHF activities for all license classes and the afternoon sessions will focus on building and operating an HF station.

Registration is required for this program. More information including the agenda and the registration link can be found at <https://www.nlfd.org/ham-bootcamp/>.

## NEDIV Youth and STEM Outreach Update

Dan Norman, *NOHF*, *Assistant Director for Youth Outreach & STEM Learning*

In January I became part of the NEDIV team and will be focused on Youth and STEM activities and outreach to further the on-going effort to recruit Youth and Youth Leaders across New England. I'll be visiting six local Ham Radio clubs per quarter to be a resource for this effort. Beginning in February I've been meeting twice a week via Zoom with the Division team to work on planning and identifying areas to pursue including involving a larger STEM and youth group to attend a Kickoff meeting held online on April 20. Information and ideas around Youth and technology were plentiful and the advice received will be very helpful as we progress our Youth program.

Planning is being done for 2 major upcoming events this year, August 26, 27 the HamExposition will be held in Boxboro, MA and also the BigE (Eastern States Expo) in Springfield in Sept/Oct, and NearFest in late April. We'll have an info table at each and will use the time to meet and chat with leaders, youth, teachers, and individuals who are involved (or wish to be) with Youth education and Ham Radio license prep. Please stop by and visit us! We look forward to meeting you. Thank you,

# FALMOUTH AMATEUR RADIO ASSOCIATION (FARA) TRAILER PROJECT OVERVIEW

*by Ralph Swenson, N1YHS*

Pursuant to the request of the FARA Board of Directors, a committee was formed to investigate the possibility of putting together a mobile communications trailer to be used by FARA for Field Day, Public Service Events, Emergency Response and to support the community at large.

A volunteer committee was formed by several members of FARA to identify the objectives of the trailer, equipment needed, its ability to be deployed and the estimated monies needed to purchase and outfit the trailer.

After careful consideration, and review of similar trailers developed by other amateur groups, the size of the trailer was identified, along with the equipment most members felt would be needed to properly outfit it. With these ideas in mind, a list of equipment and related costs were put together, to put a professional mobile communications platform together. It would support not only FARA's needs and the local community, but also play a role in regional communications support as well.

It would be the intent that the trailer could be readily towed by a suitable pick-up truck or comparable SUV when requested. Once on scene, the trailer could be deployed into full service in about 30- 45 minutes. This would include HF and VHF/UHF capabilities.

The on-board radio equipment would be self-powered through a trailer generator and/or on-board batteries, or through a shore power connection when available. Air-conditioning and heating would be included, to allow comfortable, year-round operation in the field.

Radio equipment would include HF, VHF, UHF, DMR, D-Star, Fusion, Digital Operation (Packet, PSK, FT8, Etc.), Public Safety (VHF and 800 Trunked), operated from 3 – 4 operator positions.

Funding was raised through donations from local businesses and organizations, FARA membership and club funds.

Once funds were in place, a new 16 Ft enclosed trailer was ordered in late 2019. based on the specifications set forth by the Committee. This included full insulation, walk-on roof, plywood interior, finished floor and a heating/air-conditioning system.

Timing could not have been worse. COVID hit our nation within weeks of receiving the trailer in 2020. With the trailer being graciously stored inside the JBCC Fire Station on Joint Base Cape Cod, which provided us a heated building to work in, access into the building was closed down only to authorized personnel, due to the strict COVID restrictions. We unfortunately had no other place at the time to store the trailer inside, so we were locked into this spot.

Because of COVID regulations, it wasn't until that Fall, that we were able to have access to the building and begin work. There was only a handful of people from FARA (because of their positions on the Military Installation) that were allowed into the building to work on the trailer. With this opportunity at hand, they went right to work, and started the demanding task of putting the trailer together. With all of the collective ideas in hand, materials were secured to begin the carpentry, equipment rack installations, wiring, antenna installations, electrical power work and painting. Much of the hardware, antennas wiring and electronic supplies were secured through donations and surplus sources, which helped greatly to keep the costs down. Many of the control panels in the equipment racks, for AC and DC power distribution, antenna patching, etc. were all custom made to support the unique needs of the trailer.

The goal was to have the trailer done for Field Day 2021, and we were able meet that goal after about 6 months of dedicated work building the 3 operating positions, electronics racks and storage.



Field Day 2021 was the maiden voyage for the trailer, and it was a great success! We operated on a 7500 watt generator for the event, and had two positions operating on HF with no interference problems. Plans for 2022, will include final lettering of the trailer, addition of more cabinets and shelving. Events will include Field Day, the Falmouth Road Race and the Cape Cod Marathon, as well as various drills and exercises.

Special thanks to all those involved with the project, the support of FARA, SEMARA, Falmouth Masons Lodge, the Joint Base Cape Cod Fire Department and other local organizations.

The trailer is equipped as follows:

- Radios:
  - 3 Ea 2M/440 Radios (includes Fusion, DMR and D-Star)
  - 3 Ea Marine Radios
  - 3 Ea Scanners
  - 1 Ea GMRS Radio
  - 1 Ea 900 MHz Radio
  - 1 Ea Dual Band Public Safety 800 Trunked/VHF Radio
  - 2 Ea HF Radios
- 15 External Roof Mounted Antennas (VHF/UHF 700-800 Wideband, 900, UHF, VHF, 6M, Marine and Scanner);
- HF 10/15/20 M Beam;
- Fully Wired Computer Data Network at each position;
- 12 VDC Power Distribution at each position, with USB Charger Ports;
- WX Station;
- GPS Netclock;
- 30 Ft Portable Telescoping Military Tower;
- External RF, Data, Telco and DC Power Connector Panel;
- PA Audio System;
- 2 Ea 200 A/Hr 12 VDC Battery Systems W/Chargers;
- AC Power Distribution Panel;
- RF Distribution Panel;
- Tables, Chairs;
- External DC Scene Lighting;
- Internal AC and DC Lighting
- 2 Ea Rechargeable Flashlights;
- Custom Radio/Headphone Interface System;
- Tools, Hardware, Spare Parts and Supplies;
- Numerous Coax Cable Assemblies;
- Shore Line Power Cables and Extension Cords





# ARRL LEADS THE CHARGE AGAINST REGULATORY FEES FROM THE FARM BILL

*by Phil Temples, K9HI*

Threats to the Amateur Radio Service aren't always spelled out in black and white. Sometimes they're buried in the form of obtuse legislation and regulation that doesn't mention our hobby-service by name. Case in point: an obscure announcement from the Department of Agriculture appeared on December 22, 2021 in the Federal Registry entitled, "86 FR 72540: Land Uses; Special Uses; Annual Programmatic Administrative Fee for Communications User Authorizations"—better known as "The Farm Bill."

The Forest Service, under the U.S. Department of Agriculture, proposed to amend its existing regulations to charge an annual administrative fee for new and existing communications use authorizations to cover the costs of administering the Agency's communications use program. Wireless users situated on public lands would be charged a new annual fee of \$1400. According to the Forest Service, "These fees represent the Forest Service's estimated average cost of administering its communications use program, prorated among all authorization holders."

Amateurs impacted by the administrative fee saw it in a different light. "This would put us out of business on repeater sites," wrote one repeater owner in the Pacific Northwest. "As you know a lot of us put our own money up to provide repeaters and communications links for Amateur Radio. Without mountain top sites VHF and UHF communications would suffer, especially in the event of an emergency." Soon, other amateurs were asking, "could this ultimately impact SOTA (Summits On the Air) operations, too?"

Enter the ARRL.

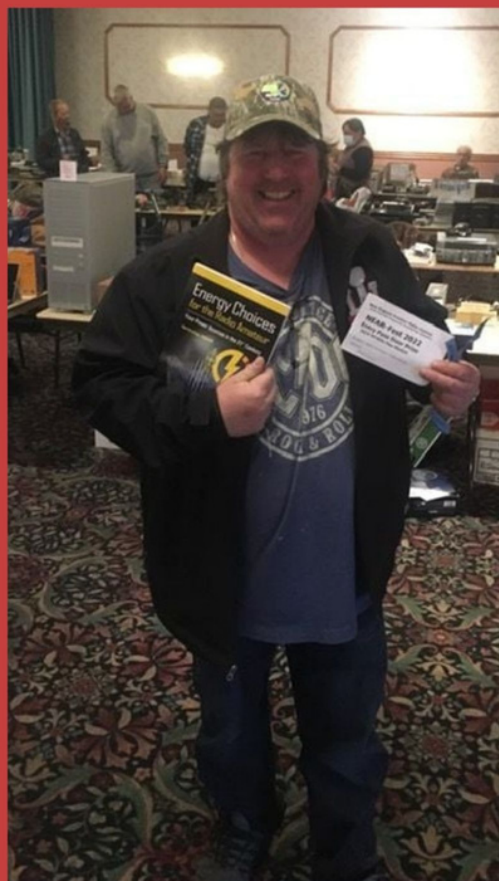
Within days of the proposed regulation, the League investigated the matter and issued Special Bulletin Number 32: "ARRL encourages Amateur Radio licensees to file comments opposing the imposition of the proposed administrative fee on Amateur Radios users. Comments must be received in writing by no later than February 22, 2022. Comments may be submitted online at the Federal Rulemaking Portal[...], or via USPS mail to Director, Lands & Realty Management Staff, 201 14th Street SW, Washington, DC 20250-1124, and must include the identifier "RIN 0596-AD44."

The ARRL beat the drum loudly. It called attention to the comment period and, of course, filed very thorough comments authored by ARRL's Washington, D.C. counsel, David Siddall, K3ZJ, a practicing attorney in Washington, D.C., focusing on communications and related administrative law. "Although the discussion put forward by the Forest Service in its proposal focuses on commercial uses, the proposal would sweep within its requirements amateur radio uses that are solely noncommercial," ARRL said in comments filed on February 22. "Radio amateurs establish and maintain facilities at certain locations for public service purposes with no remuneration or reimbursement. Unlike broadcasters and commercial wireless and fiber providers, radio amateurs are uniquely barred by the terms of their federal licenses from receiving compensation of any sort."

The League's comments were well flushed out and contained appendices of news stories of amateur radio involvement helping combat forest fires in California and Colorado. The response from ARRL members as well as the entire amateur community was loud and immediate. The Department of Agriculture was overwhelmed with comments—so many, in fact, the deadline for comments was extended until March 31, 2022.

The jury is still out regarding the final outcome of the Forest Service's proposed fee, but actions such as these underscore the importance of closely monitoring for proposed changes to any rules and regulations that might adversely impact amateur radio. We must remain vigilant and respond—both as individuals and as a national organization—to Notices of Proposed Rulemaking and other regulatory actions before they become codified into law.

# 33RD MOUNT TOM ARA HAMFEST



Photos Courtesy of Daniel Vierno, K1VWQ



# RECRUITMENT: ONE QSO AT A TIME

by Cory Golob, KU1U

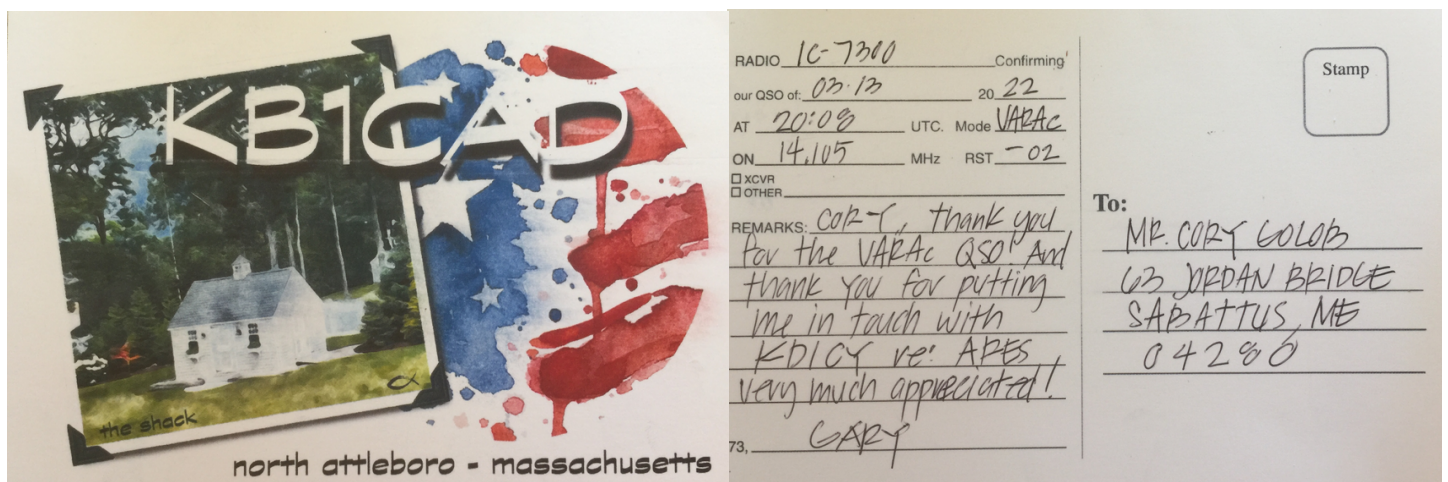
Recruitment is an idea that affects any group or club, ham radio related or not. After being on more Zoom and Microsoft Teams calls a week than I care to admit, it can be easy to get distracted from the enjoyable parts of the hobby. I try to get on several nets every week: Phone, CW and Digital. I also like to experiment with the hobby, trying new things and understand what they bring to the table.

My most recent experiment has been dabbling with a digital mode called VARA. This newer digital mode is software based and rivals PACTOR-III modem speeds at a fraction of the cost. This mode was developed by Jose Alberto Nieto Ros, EA5HVK. His website can be found at <https://rosmodem.wordpress.com/> and while there is a free version available, the unpaid version encounters throttled speed compared to the paid version. I decided to take the plunge and purchase the \$69 license for the paid version. You may be able to search around and find a discount out there. I recall reading in the past that a group discount was available for bulk purchases of 10 licenses, you may want to reach out to a local ARES group to see if this discount is still available. Regardless, I thought \$69 to play around with VARA was way more economical than spending \$1500+ on a PACTOR-III modem... I get heart palpitations just thinking about it.

After joining some facebook groups specific to the VARA mode, I was able to learn of a chat program called VarAC that can be used with this mode. There is a VARA chat program already called VARA Chat and VarAC does work when chatting with hams using that program, however, VarAC offers additional functionality. There is a QSY function, done by typing QSYU or QSYD, which sends a request to the other station on if they want to move frequencies up or down by 750 Hz, if they accept, their radio will change frequencies if configured correctly. This is a nice way to move off frequency and allow the calling frequency to be used for other stations to try and make contact.

I was able to have a nice conversation with a newer ham, Gary, KB1CAD, who had just earned his license about 4 months ago and upgraded to General. We talked briefly about emergency communications and he expressed interest in joining a local group, but was not sure where to go. I was able to send him follow up information by Winlink (his email was not listed in QRZ.COM) and was able to get him connected with Rob Macedo, KD1CY, who is the Section Emergency Coordinator for Eastern Massachusetts. This was a great contact that lead to forward progression, matching a ham with in interest with the most appropriate resource.

If you are interested in learning more about VarAC, please visit <https://www.varac-hamradio.com/>



# MAINE MESH NETWORKING PROJECT

*by Bill Richardson, NG1P*



Mesh Networking in Maine the AREDN way. NG1P (Bill) and N1JOV (DJ) have been testing out ham radio mesh networking using the 2.4Ghz and 5.8Ghz ham radio allocated frequencies. Bandwidth speeds of up to 40Mbps is possible. Bill and DJ have been testing in the Brunswick/Topsham Maine area for the past 2 years. Today, the network is small with just 5 mesh nodes. A raspberry pi is providing some basic services like Voice Over IP (VOIP), chat, monitoring and BPQ packet connectivity. We are looking to expand coverage by gaining approval from repeater/tower owners. This mesh network has an opportunity to cover the whole state and into other New England states. Bill has prepared a presentation and demo for the upcoming ARRL Maine State Convention. He will be presenting both days (1 April @ 7pm and 2 April @ 10am) Hope to see you at this event.

Bill's presentation is located at this link: [NG1P-Wireless Mesh Using AREDN](#)

For more info on AREDN go to [www.arednmesh.org](http://www.arednmesh.org)



*Looking for articles that represent all sections in the New England Division. Please send submissions to Cory Golob by emailing [ku1u@nediv.arrl.org](mailto:ku1u@nediv.arrl.org)*