



NEWS FOR AND BY BARS MEMBERS

BARS BillERICA Amateur Radio Society

MARCH 2023

BARS meetings are going “hybrid” in April!

We will resume in-person club meetings with the April meeting. We will continue to also allow members to attend virtually using Zoom.

The safety and well-being of our membership is important to us. Whether you attend in person or virtually is entirely up to you.

--BARS Management.

BARS is going to ARRL Headquarters

BARS will be having a Club trip to the ARRL Headquarters on Friday, March 24. Further details will be provided in email as the date approaches.

A Message from the President By Doug Bruce, N1WRN

Greetings Fellow Members,

Hopefully everyone is staying healthy and warm as we navigate yet another New England winter. I hope everyone is taking advantage of the ever-improving propagation that is being offered in Cycle 25! I saw recently that the SFI (Solar Flux Index) reached an all-time high of 363! That is unheard of even in the best of the peaks of sunspot cycles. I know that I have had great luck on the higher bands of 10, 12, 15, 17 and 20 meters recently! I am taking advantage of the conditions to pad my statistics on these bands for my Award totals.

I would also like to comment for a bit here about the recently completed 3Y0J DXpedition. I have been following this group on Facebook, and it saddens me to have heard all of the jamming

attempts by other ham radio operators when they were on the air. I cannot for the life of me understand how warped these people’s minds are to disrupt a group of fellow hobbyists who went to the most remote island on Earth to enhance our hobby and allow people to get their ATNO for their logbooks. These “hams” should be ashamed of themselves for engaging in such disruptive activities on the air. If they are ever caught they should be banned for life from our great hobby. The free will of some humans that do this leaves a lot to be desired IMHO.

On another note, I am really looking forward to our upcoming Club trip to the ARRL Headquarters on Friday March 24. I heartily encourage all Club Members to make the pilgrimage with us to Newington, CT., to the Mecca of ham radio in the United States. We should consider ourselves lucky to live so close to this great shrine of our hobby. I have visited a few times, and it is a thrill for me every time I walk through the doors of the W1AW station. It is a fascinating take, and you are allowed to operate in the same station as the illustrious founder of the ARRL, Hiram Percy Maxim, 1AW, did so many years ago.

They have five studios that visitors are allowed to operate; The only requirement is that you bring the Reference Copy of your FCC license. You even get a nice commemorative certificate from W1AW as a souvenir if your visit that is suitable for framing. I will email further details as we get closer to the event.

On another note, we are looking to get back to in person meetings (as well as keeping the Zoom option) for our April Club Meeting at the Church on April 5. Stay tuned for further details.

In closing, I encourage Club Members to GOTA, (Get On The Air), as this is what our great hobby is all about!

73,
Doug
N1WRN

Next BARS Zoom Meeting: March 1 at 7:00 PM - Program: "HF DXing and Logging"

Presenter: Tom Carrubba, KA2D

I am pleased to announce that we will have Tom Carrubba, KA2D, who will give us a dual presentation on DX'ing on the HF bands, as well as a tutorial on using logging programs. Tom was first licensed in 1978 as KA2DFO. He is an active DXer, DXCC CW, RTTY and SSB, 5BDXCC with 30, 17 and 12 meter endorsements and DXCC Challenge. In April, he made DXCC Honor Roll via LoTW. He is an Island Chaser and Contester, so his talk should be of great interest to the Beginner DX'er as well as the Experienced DX'er.

Tom is a member of the National Association for Amateur Radio - ARRL, the Great South Bay ARC - GSBARC, the Long Island DX Assoc. - LIDXA, the Order of Boiled Owls of NY - OBONY, and the Yankee Clipper Contest Club - YCCC, so he has vast experience as a DX'er that he is willing to share with our Club Members. Please join us via ZOOM for this informative and entertaining presentation!



BARS will announce the link to join the Zoom meeting before the meeting, but it will be posted to the BARS email list and should not be shared outside our Club. Are you on the email list? If not, please send an email to bars-subscribe@wlhh.org and then simply reply to the robot response from the server and you will be subscribed.

Observing our Zoom meeting requires only a web browser and headphones/speakers. You do not need a webcam or microphone unless you want to speak or be seen.

Before our meeting date, please go to <https://zoom.us/test> and see if it will function for you. If you have problems, we can try to assist – feel free to ask questions on the BARS email list.

We are looking forward to “seeing” many of you on Wednesday 3/1 here at 1900.

Doug, N1WRN

From the Editor's Desk

By Marla Wallace, WA1GSF

This is the second installment of my HF station saga. Since last issue, I bought a new laptop to use exclusively with the station, an Asus Zenbook. It runs Windows 11 and boots up in seconds, thanks to its SSD. The OLED display looks fantastic!

But it's a bit lacking on connectivity. With the AC supply plugged in, the only external connections available are headset, Micro SD card (a little inconvenient, as the 7300 uses a full-sized SD card, I solved this by getting a micro SD card and an adapter), Ethernet (which I hope not to need, as the wifi router is only a few feet away) a single USB2.0 type A connector and a single USB3.0 type C connector. And the touchpad surface overlaps the buttons for left- and right-click, which takes some getting used to – I may decide to use a mouse instead.

But I need to get some sort of external CD reader so I can load the Icom control software. Though I have an experiment I want to run this month sometime: Using my other laptop (for which I have a CD reader), copy the contents of the Icom CD to a USB thumb drive and see if the new machine can use it. Barring some kind of draconian copy-protect scheme, I should get away with that.

As for what software to run, I can either research what's available for Windows or do something creative and install VirtualBox, set up a virtual machine and put Andy Stewart's Ham Radio For Linux package on it. This might be beyond what my 75-year-old brain can cope with anymore. Stay tuned...

In Orbit

By Paul Graveline, K1YUB

Report On The Progress In Developing A Cubesat Simulator

In the January BARS newsletter I reported on the proceedings of the 40th AMSAT Symposium in Minneapolis in late October 2002. In that article I mentioned that I was there to give an update on a project which I had been working on with a group of five other hams. The formal name of the project is the AMSAT CubeSatSim Educational Materials Team. The activities revolve around the development of a CubeSat Simulator (CSS). The main objective of developing a CSS is to provide an educational device which could be used to more rapidly introduce interested parties into the various telemetry modes used by low earth orbiting (LEO) satellites without having to be depended on limited real time passes.

The CSS is designed to be employed in a large spectrum of educational environments ranging from late elementary school to graduate level college courses or even in the business world to upgrade employee skills.

Leading the team is Dr. Alan Johnston, KU2Y, AMSAT Vice President of Educational Relations who is a professor of electrical engineering at Villanova University. Other members beside me are : Fredric Raab KK6NOW, Mark Samis, KD2XS (formally WA2GCS & WN2GCS), David White, WD6DRI who is active in high altitude balloon flights.

The CubeSat Simulator consists of two separate radio devices.

The first, is a replica of a 1U cube satellite powered by a battery and transmitting the telemetry signals over a short distance in the Ham 70cm band. The data transmitted is dependent on the readings derived from sensors on the CSS. So as conditions might change in the room, this would be reflected in the CSS output.

In addition the CSS can generate signal sources in five modes:

- Slow Scan TV (SSTV)
- Frequency Shift Keying (FSK)
- Binary Frequency Shift Keying (FSK)
- Continuous Wave (CW)
- Amateur Positioning Radio System (APRS)

You can always check the output with a hand held tuned to the ham 70cm band.

The second device is a small ground station based on a Raspberry Pi feeding a small screen employed to display the telemetry. The ground station is able to tune down to the FM radio band.

Of course you can also feed the output to a computer display and view it on a large room sized screen for classroom situations.

When construction and debugging the prototype CubeSat Simulator concludes, another challenge lies ahead in providing the necessary complementary educational resources to support the users. In order to do this the group is engaged in creating a powerpoint presentations which are designed to introduce prospective users to the CubeSat Simulator.

The presentation's planned topics in sequence of the presentation are:

- Introduction to Telecommunications
- Who is AMSAT
- Introducing the CubeSat Simulator's operation capabilities
- Constructing a CubeSat Simulator (a complete parts package is planned as well as the opportunity to buy it right off the shelf ready to go).
- How to obtain a Ham License

Like any new endeavor, the specific details are probably going to change somewhat based on feedback from potential users

An additional challenge is how to best serve a diverse potential audience (from elementary school teachers, maker groups, GAP high schools, college level instructors and parents engaged in homeschooling).

While not intended to be included in the present project, the ability to generate data provides the opportunity to use the CSS as a starting point in introducing data analysis to the learners.

The group hopes to have the CSS available for distribution sometime this spring.

If you would like more information on the CSS contact me at paulK1YUB@gmail.com.

I am planning to go to HamCation in Orlando Feb 10-12. I will report on it in next month's BARS Newsletter.

Results of the BARS Survey

By Mike Nelson, KA1INE

The flow of surveys coming in has come down to a trickle so I wanted to tally the results and get them into the newsletter. There was a total of 12 responses so it may not represent the interests of the total membership but it does give us an indication of which direction to go.

After slicing and dicing the responses in several ways for presentation, I decided to keep it simple and add all the responses from levels 6 to 10 to see which categories gave the highest level of interest.

Kit & antenna building won out with the most scores so that will be high on the list of activities this year. In second place there was a tie between POTA & field day in which both had high interest from a lot of the members. Emergency communications and mentorship was also high on the list with many of the newer hams requesting help in these areas. Please let me know if you could spare a little time occasionally to help them out.

In person meetings was favored by more than half the group which should start again in April. I think it's important to meet in person in order to build friendships and knowledge and also work on projects together. Zoom meetings will also be available for those who aren't comfortable with in person meetings or can't make the trip.

There was also a lot of interest in Fox hunts and balloon launches with ATV, beacons, cameras, etc. A couple of members showed interest in leading these types of groups so I'll be reaching out to them in the near future. Fox hunting is a good activity for those with technician licenses to demonstrate direction finding and setting up your own 'foxes' for practice.

The Nashua Area Radio Society launched a balloon in 2017 with the help of Bishop-Guertin high school students to study the flight path and atmospheric science and radio technology. This project was lead by Fred Kemmerer, AB1OC the current New England ARRL Division Director. You can read more about this balloon launch at <https://www.n1fd.org/2017/11/03/high-altitude-balloon-data/> for more information. With current situations

around the country, a balloon launch may or may not be a good idea!

There was less interest in the remaining categories but a few technicians are looking to upgrade their licenses. Tests are given each month by Bruce Anderson, WILUS so feel free to reach out to him and make arrangements to upgrade.

Thanks to all who responded to the survey, it's much appreciated!

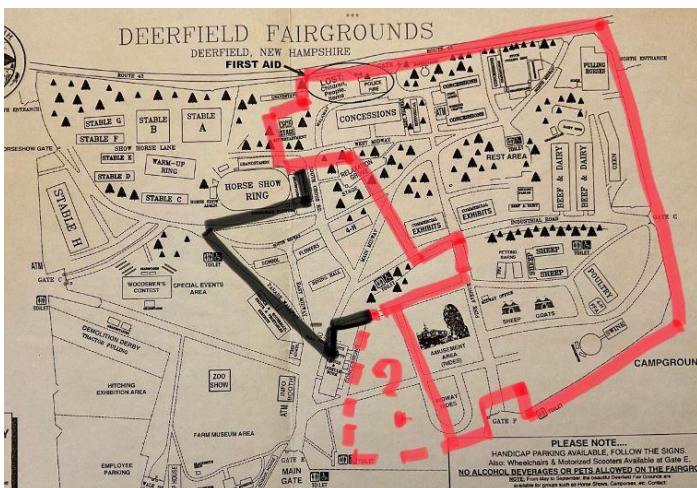
Strays

New Date for NEAR-FestXXXIII

FOR IMMEDIATE RELEASE

NEAR-FestXXXIII will be held on April 28th and 29th 2023 and not on its traditional date which always has been the first weekend in May every year since 2007. NEAR-Fest XXXIV scheduled for October 13th and 14th 2023 is NOT affected.

Last month the Deerfield Fair Association informed me that they booked two events, the NH Farm, Forest and Garden Show and the NH Arabian Horse Ass'n Show at the Fairgrounds for May 5th and 6th 2023 which is the weekend before Mothers Day. We were told we were welcome to hold the NEAR-Fest at the same time with the two other shows but there would be a "few small changes" to the parts of the Fairgrounds that we would be allowed to use.



Regretfully I decided the best course of action is to take a chance on the weather one week earlier and change the date. My team agrees with me. It's the best way to deal with it. We have full use of the grounds with no stinking and noisy horses and outsiders to bother us. I resisted it at first but changed my mind after discussing it with my colleagues who run the fester with me.

Is this a one-time thing or is it permanent? Depends on if the horse show comes back next spring. We could co-exist with the Farm Show but it is the horse show that causes us the problems

because we use part of the grounds adjacent to the Horse Show ring and bleachers.

I still don't like it but I know it is the right decision. We apologize for any inconvenience that this may cause anyone.

Merry Christmas and Happy New Year my friends.

Mister Mike, WIRC <w1rc@near-fest.com>

Becoming an ARRL member or is your membership up for renewal?

One of the benefits of being an ARRL Affiliated Club is a commission for recruiting new ARRL members and securing timely ARRL member renewals.

Each new ARRL member earns the club a \$15.00 commission. New members are defined as never having been a member or a returning member that has not been a member for two years. Each renewal earns the club a \$5.00 commission. There is no limit to the amount a club can earn in this program.

Multiyear memberships earn only one commission. Life, Family, International, Blind, and Student memberships are not eligible for a commission. The member will not be eligible to receive a gift or incentive if the club collects a commission on the membership.

Currently at least 82 BARS members are also ARRL members. If we all renewed through the club we could potentially receive \$410 per year from the ARRL.

If you are interested in renewing your ARRL membership through the club fill out the following form [ARRL Affiliated Club Membership Application \(pdf\)](#). Then forward it to WILUS@hotmail.com

Is your Email address on the FCC site up to date?

§ 97.23 Mailing and email addresses.

Each license grant must show the grantee's correct name, mailing address, and email address. The email address must be an address where the grantee can receive electronic correspondence. Revocation of the station license or suspension of the operator license may result when correspondence from the FCC is returned as undeliverable because the grantee failed to provide the correct email address.

[85 FR 85533, Dec. 29, 2020]

I recommend that you log on to the your FCC Registration at <https://apps.fcc.gov/coresWeb/updateRegistrationPre.do> to make sure that your email address is up to date. Also in the future should you change your home address or your email address be sure to remember to update it on the FCC site.

[The \$35 FCC application fee applies to new, renewal, rule waiver, and modification applications that request a new vanity call sign. The fee will be per application.]

Administrative updates, such as a change of name, mailing or email address, and modification applications to upgrade an amateur radio licensee's operator class or to request a sequentially issued call sign, are exempt from fees. – ed.]

--de Bruce, W1LUS

Upgrading Your License? Here's a Resource

If you are thinking of upgrading your license using one of the Online exam sites. I recommend that you take some free practice exams on HamStudy.org. I recommend it because the software used to generate practice exams on HamStudy.org is the same software that is used to create exams for online tests. By doing that when you take an online upgrade exam the test question format will be familiar. With HamStudy.org practice tests you should use the keyboard to select the answer, A,B,C, or D and not your mouse as that is way online exams are run.

--de Bruce Anderson, W1LUS

Making ZOOM available to Elmers

In this time of social distancing we have been using Zoom for our monthly club meetings. I have been thinking that Elmers could also be using Zoom to coach new hams instead of actually going to visit with them. Elmers could perhaps help with programming a new radio with the new ham sharing their computer screen and the Elmer helping to walk them thru the process. An Elmer could have Zoom on their cell phone and show a new ham how their shack was setup. Use your imagination and see how you might use this tool. If you would like to use Zoom for this, contact Bruce, W1LUS@hotmail.com, with a date and a time and a meeting will be setup for you. You may also contact Bruce if you would like training on using Zoom to Elmer someone.

--de Bruce Anderson, W1LUS

Friday and Sunday Night CW Slow Speed Contest

Every Friday and Sunday night, there is a weekly slow-speed CW contest run by the local K1USN guys. This is a good way to polish up your CW skills. See <http://www.k1usn.com/sst.html> for details. Currently, the schedule is:

Fridays 20:00-21:00 UTC (3-4pm EST) and
Mondays 00:00-01:00 UTC (7-8pm EST Sunday).

K1USN

SLOW SPEED LIMIT 20 WPM

BRAINTREE, MA

K1USN SST

Weekly CW Slow Speed [Con]Test

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-- de Tom Walsh, K1TW

NEW HAM JUMPSTART PROGRAM

After giving away thousands of free handheld radios to new hams, the QRZ Jumpstart program is back with an exciting new deal!

QRZ, RT Systems and GigaParts are teaming up to offer a more sustainable program that will run at least through the end of this year and will be expanded to include hams who have been licensed for 6 months or less. The new program offers a coupon code to the new ham that gives them a QRZ-1 radio, programming cable, RT Systems programming software, New Ham Welcome Kit, and a QRZ membership for only \$21.99.

This program is available to amateur radio operators licensed in the USA and expires March 31, 2023, or while supplies last. To signup, new hams should complete the application process at www.qrz.com/jumpstart

Jumpstart packages will be begin shipping immediately.

What's Included:

- Explorer QRZ-1 Handheld radio
- Programming cable
- RT Systems Programming Software
- Premium QRZ Subscription

How it works:

1. Apply at www.qrz.com/jumpstart
2. Receive your unique discount code from QRZ via email
3. Add a QRZ-1 to your cart
4. Add any accessories you may want to purchase
5. At checkout, enter your unique discount code

73,
--de Bill Poulin, WZ1L

Secretary's Reports

from Marla Wallace, WA1GSF, Secretary

BARS General Meeting – Feb. 1

BARS President, Doug Bruce, called the meeting to order at 7:05PM.

We are trying to get a trip to ARRL headquarters organized. It is hoped that the trip will be in early March.

Bruce K1BG presented on the basics of learning cw. His talk started at 7:10 and lasted until 8:45.

There were 23 participants

The meeting adjourned at 8:55.

There was no BARS Board of Directors Meeting.

BARS Membership

Our current combined membership is 125. To date 54 members have renewed their 2023 membership. 41 members from 2022 did not renew their membership. Anyone with a question about their renewal status can email me at W1LUS@hotmail.com to get your current status.

from Bruce Anderson, W1LUS, Treasurer

2023 BARS Member Dues

A \$15 annual BARS membership now runs from January 1st and expires on December 31st. Any renewal or new membership made after September 1 will be valid until December 31st of the next year. Memberships allow us to

- Pay our bills;
- maintain our great web page;
- fund field day;
- and bring the membership a great variety of informative meetings and speakers.

Treasurers Report for March 2023

It is the start of a new year and we are accepting dues for the year. For 2023 dues will remain at \$15.

Dues can be paid several ways:

- Via bank to bank transfer with Zelle, Venmo, PayPal, etc. by sending \$15 to bars.dues@outlook.com.
- With credit card by using the Join/Renewal membership form on the W1HH.org website.
- With cash or check by mailing \$15 to Billerica ARS, 16 Regis Road, Tewksbury, MA 01876

In February, our expenses were:

- Zoom \$15.93,
- Internet hosting \$119.40,
- PayPal \$3.03.

We had 3 new/renewals for an income of \$45. We now have \$801.71 in the Bank and \$1389.87 in our PayPal account for a total of \$2191.58.

Bruce Anderson
W1LUS

BARS Needs You!!!

We are looking for a few good hams to act as net control on the regularly scheduled Wednesday night nets! All it takes is one night a month; if you are interested contact Doug, N1WRN.

Also, the club needs volunteers for light tasks of ~ 1 hour a month. Are you able to pitch in? Contact Tom Walsh, K1TW.

Wednesday Night Net

Join us on the Westford 146.955 Repeater for the weekly BARS net each Wednesday at 8:00 PM (**except on the first Wednesday of the month which is club meeting night**). *Note: Thanks to the Westford Police Amateur Radio Team (PART) for their generous act of making their repeater available to us.*

Repeater info:
WB1GOF
146.955 MHz
-600 kHz (normal) offset
Encode CTCSS 74.4 Hz

Reminder: “kerchunking” the repeater is not only impolite, it’s illegal. It constitutes an unidentified transmission. If you need to check that you’re making the repeater, say something like “This is <your call> standing by on the frequency.” Thanks for your courtesy.

Club Meetings

Because of the continuing COVID health crisis, in-person club meetings are on hiatus. Club meetings are being held “virtually” using Zoom. We hope to resume in-person meetings in the fall.

Club meetings are held on the first Wednesday of the month.

VE Sessions

Our VE sessions are again being held in-person at the Chelmsford Bible Church. Pre-registration for our in-person exams is suggested. Contact w1lus@hotmail.com for registration information.

VE sessions are held every month on the 2nd Thursday at 7:00 PM at Chelmsford Bible Church, 128 Gorham St., Chelmsford MA. Park in back and enter by rear door. [Chelmsford Bible Church Hall, 128 Gorham St, Rear Door, Chelmsford MA 01824-3220 \(map\)](https://www.google.com/maps/place/Chelmsford+Bible+Church+Hall,+128+Gorham+St,+Rear+Door,+Chelmsford+MA+01824-3220/@42.5611111,-71.0000000,15z)

February VE Session Report

On February 9th, four people showed. When we were done we had one new Technician, one General upgrade and one Extra Upgrade.

Our next exam session will be on March 9 at 7:00 PM. Thanks to Gary W1GFF, Craig K1CWD, Don W1DM, Peter N1ALO, Bill W1ZL and Antonio KB1KDS for their help in running the session.

--de Bruce Anderson, W1LUS

Club Breakfast every Saturday

On Saturday mornings around 8:30AM, have a virtual Zoom breakfast session (link provided in email if you subscribe).

We also meet in-person weekly at 8:15AM for a casual, social breakfast at Stelio's restaurant.

[Stelio's Family Restaurant, Billerica, MA](#)

Future Meetings

The 4/5 meeting will be held both in-person at the Chelmsford Bible Church and simulcast via Zoom.

Subscribe to the BARS Mailing List

To subscribe to the BARS email list, send a blank email to bars-subscribe@w1hh.org and watch for an automated reply. Note that bars-subscribe is all one word.

Reply to that message from the list server and you are then subscribed.

To post to the list, address your email to bars@w1hh.org

February Get-on-the-Air Suggestions from Scott Ginsburg, K10A

BARS is a “get-on-the-air” (GOTA) club. We encourage members to participate in the varied events on HF and VHF.

Here are the popular suggestions for this month:

<u>Date</u>	<u>Event</u>
Mar 4-12	Novice Rig Roundup http://www.novicerigroundup.org/
Mar 4-5	ARRL International DX Contest, SSB ** http://www.arrl.org/arrl-dx
Mar 11-12	Stew Perry Topband Challenge http://www.kkn.net/stew/
Mar 12	North American Sprint, RTTY http://ncjweb.com/Sprint-Rules.pdf

** Top recommendations for this month

Recurring Events – visit webpage for exact times and dates:

K1USN Slow Speed Test - Every Friday 20:00 UTC / Every Monday 00:00 UTC <http://www.k1usn.com/sst.html>

Straight Key Century Club (SKCC) Weekend Sprintathon – the Saturday following the 6th of every month at 1200 UTC
http://www.skccgroup.com/operating_activities/weekend_sprintathon

Details on each contest above and more events can be found every week on the WA7BNM contest calendar at:
<https://www.contestcalendar.com/weeklycont.php?mode=custom&week=current>

BARS Leadership Team

OFFICERS:

President: Doug Bruce, N1WRN
Vice President: Mark Nelson, KA1INE
Treasurer: Bruce Anderson, W1LUS
Secretary: Marla Wallace, WA1GSF
BoD: Don Melanson, W1DM
BoD: Bill Poulin, WZ1L
Ex Officio: Gary Frascarelli, W1GFF

VOLUNTEERS:

Net Coordinator: Doug Bruce, N1WRN
Newsletter Editor: Marla Wallace, WA1GSF
New Member Outreach: John Fisher, KC1FTJ
Field Day Chair: Mark Nelson, KA1INE