



NEWS FOR AND BY BARS MEMBERS

FEBRUARY 2024

On the recommendation of the Board and approved by a vote of the membership at the October, 2023, meeting, BARS meetings will become “hybrid” – the meeting will be held at the Chelmsford Bible Church and available simultaneously on Zoom – beginning with the February, 2024, meeting.

The safety and well-being of our membership is important to us.

--BARS Management.

A Message from the President By Doug Bruce, N1WRN

Greetings Fellow Members,

I hope that everyone is getting through this tame winter ok. I would much rather have a foot of powder snow than the 2-3 inches of slop that seems to be the norm this winter.

Radio wise, I had the distinct pleasure of being able to work the Clipperton Island DXpedition, TX5S, the other day on 12 meters on FT8. It took some patience for sure, but my heart skipped a beat when I saw my call sign come back on the screen in red! They actually called me, and I responded back, and was lucky enough to get the valued “RR73” in response! I then checked Clublog, and I was “in the log!” so to speak. This contact is my first big time rare DX contact, (#38 most wanted on the Clublog list!). I came close with Bouvet Island and Crozet Island but was zero for two with those two DX entities.

When I started my ham radio journey as a Technician, I thought it was a big deal to make a contact through the Billerica Repeater on 147.12. As my Elmer always tells me, Rome was not built in a day. He has been a ham for 61 years now and he is still adding band

countries to his impressive ham radio resume. When I put up my 2 meter dipole, (built with the help of my Elmer Peter, N1ALO), my range then expanded to repeaters thirty to forty miles away! That expanded my ham horizons to multiple nets, interacting with more and more hams along the way.

Then, I got my General Class license. This license class opened my ham radio world to all over the globe! I began making contacts all over the US (my first non-local HF contact was with WY3P in Taneytown, Maryland, 369.9 miles distant.) You would have thought I talked to a man on the moon! I could hardly contain my excitement. Soon after that, I was able to secure my WAS award from the ARRL. My first goal as a General was to collect 50 paper QSL cards from 50 states, and, in June of 2022, I attained this goal. I had my cards checked and then the ARRL sent me my WAS award, which was my first ever award in ham radio.

Next, I moved on to try and obtain my DXCC Award. This is a prestigious ARRL award for working and confirming 100 countries. I obtained my Mixed DXCC in April of 2022. It took a lot of time and patience, but I eventually got there. There was absolutely no rush to get this award, but it was very satisfying when it came in the mail. As of this writing, I am working on my 5 band DXCC Award. I am in the seventy to eighty country range on each band, and, as I go along, the new band and country combinations are getting harder and harder to work. The FT8 mode has greatly aided in my getting so many new band countries. There are always new countries on the air for me to work. I just need to be patient and put the chair time in to work them.

And then along came Clipperton. This took me to a new level of DXer. Up until now, I have been a Little Pistol DXer, but now I am starting to achieve the “Middle Gun” DX contacts, like Clipperton Island. As my station grows and is updated, I will continue into the range of the Middle Gun DXer, as labeled by the ARRL Operating Manual. The ARRL has great DX resources, but my favorite is the Low Band DXing book by John Devoldere, ON4UN. There are also many online resources to use to aid in working DX stations, such as Clublog and DX Heat, which give real time data for DXpeditions and active band information around the world 24/7.

Continuing the DX theme, we will be having Don Greenbaum, N1DG, as our Guest Speaker via Zoom on February 7, which will also mark our Club's return to in person meetings at the Church. Don has been on many DXpeditions in the South Pacific, which will give our members some valuable insight into what DXpeditions are all about.

Until next time,

G.O.T.A. (Get On The Air!)

Hope to see everyone at the Church in Chelmsford at 7:00 on Wednesday Night February 7!

73,
Doug
N1WRN

Next BARS Zoom meeting: February 7 at 7:00 PM - "DXpeditions" Presenter: Don Greenbaum, N1DG

I am pleased to announce that our Guest speaker for the Club Meeting (via Zoom and in person!) will be Don Greenbaum, N1DG, of Duxbury, MA.

Don grew up in New York City and the NJ Shore. His father, WA2UDV, was his radio mentor and two other siblings also had their licenses by the time Don became WN2DND at age 11 in 1962. After Don advanced to WB2DND and became active in traffic nets and DX earning WAS and DXCC before going to college and becoming inactive for 10 years.

Upon his return to the bands after incentive licensing, Don upgraded to Extra class as he continued his love of DXing and contesting. Today Don has worked all entities on mixed modes, and only needs P5 on CW. His mixed country total stands at 358 and he has DXCC on 9 bands and 5BWAZ. His Challenge total is 3,056. In 1996 he changed his call to N1DG.

Don was a banker in NY on Wall Street, and became Treasurer of Commodore International in the early 1980s. He wrote one of the very first ham radio logging programs in BASIC for the Commodore 64 and in the mid 1980s ported it to DOS for IBM compatibles. The job at Commodore took him all over the world and he began operating from exotic DX locations as well.

In 1986 he moved to New England and started his own computer company that exported computer components to Europe and the Middle East. It also wrote software and Don holds two patents on Machine Translation software. In 1989 he attended a trade show in Dubai and met Saeed who would become A61AD. Don has been operating from there ever since on his annual visits. Don still exports items to the Middle East but instead of computers, today it's sports and race cars.

Don has been on several major DXpeditions including VP8ORK, K4M and A52A. He has also operated as A61AD, A51DG, A73A, and /KH9, /VP9, /VS6, /BV2, /4X and /9V.

In 1997 he authored the web pages of VK0IR and posted online logs daily there were received via ham radio satellites. It was the first major DXpedition utilizing online logs and ushered in a new era for DXers. Since then he has been webmaster for over 50 xpeditions.

In 2005 Don was honored at Dayton by CQ Magazine by being inducted into the CQ DX Hall of Fame.

In 2009 Don was one of the founding members of the CW Operators' Club (member number 2). He is also an active member of the Yankee Clipper Contest Club.



We 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@w1hh.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.

I am looking forward to “seeing” many of you on Wednesday 2/7 here at 1900.

Doug, N1WRN
President, Billerica Amateur Radio Society

From the Vice President

By Mark Nelson, KA1INE

Happy New Year BARS!!

We had a nice holiday dinner at the Great Wall in Bedford along with the traditional Yankee swap. It was great to see everyone in person again and we hope to continue with that for our upcoming meeting in February. There were some great ideas of what we could be doing this year as a group and kit building was again a topic for discussion.

I've been building electronic kits since the seventies, and it has been one of my best learning activities for ham radio. I would like to see what the interest level is for selecting a kit and having members of the group get together to build them. Many of the items brought up were around POTA, QRP transceivers, CW and antenna building. Chris Lennon was kind enough to send me some very good ideas along with kit recommendations so here are some of his thoughts:

In terms of a group build, I suspect that one has to balance interest, cost, and kit difficulty. The QCX mini kits were about \$111 delivered. That included TCXO and AGC options as well as a very impressive metal case. Building those kits was fairly challenging. The first took me over a month and included at least one major failure. The second went together in four days. The Morserino product is a very impressive tool, and if you are trying to learn Morse code it is incredibly helpful. That kit is about \$100 delivered, and the build is pretty easy. The EFHW from QRP Guys was \$30, easy to build and, it is the only really usable antenna I own. Some suggestions for the group:

QRP Antenna Tuner

There are offerings from QRP Guys, Four State QRP Group, and EMTECH that look promising. My favorites are the EMTECH and Four State products.

Digital Modes QRP Transceiver

QRP Labs has the QDX, a 5 W digital modes transceiver that is well regarded. It can be built as a low band or high band model. With the metal case it is about \$100 delivered. I looked at the build instructions and it looks to be much easier than the QCX mini. So this is an appealing item because out of the build you get a seriously good radio. QRP Labs also has the new QMX which is multiband, does both digital and CW, and has the goal of incorporation SSB at some point in the future. A great radio, but the build difficulty has frightened me off up to this point. It is also about 50% more expensive than the mini and QDX, but you get a lot of radio for the money.

Random Wire Antenna

The antenna tuner is necessary because I would like one antenna that can handle more than one band. I am thinking a random wire antenna would be useful. There are various kits, or one could just buy a bunch of toroids, magnet wire,

connectors, and project boxes and roll your own. My next project plan was to do just that: 9:1 Un-Un that I could use with a random wire.

Morserino

I have heard various people talking about trying to learn Morse. I have found the Morserino to be very useful. It is an easy build, just a couple of hours, and you get a great product. It is on the expensive side for a kit. \$100 delivered.

Small crystal CW radios

Four State QRP Group has some small crystal disciplined 1W CW radios that are cheap and easy to build. The end product is not as generally useful a radio, but if the goal is just to build something easily that can be used in a QSO, just for the sake of doing it, that might be of interest.

Thank you, Chris, for all the ideas and links to the suppliers. We can certainly add to this list but we should focus on what will help technicians and new Generals get onto the HF bands and to get on the air. If you have a particular kit you are interested in, we'll gather the interest level and plan ahead.

Some links to check out:

QRP Labs

<https://qrp-labs.com/>

QRP Guys

<https://qrpguys.com/>

Morserino

<https://www.morserino.info/>

Four State QRP Group

<http://www.4sqr.com/index.php>

Pacific Antenna

<http://www.qrpkits.com/index.html>

EMTECH (home of the ZM-2 antenna tuner)

<https://emtech-qrp.com/>

Kanga Products

<https://www.kanga-products.co.uk/>

Psk-31 "EASY DIGI™" Sound Card Interface PSK RTTY SSTV FT-8 KIT

<https://www.ebay.com/itm/325287887373?>

Ham/Amateur Radio VHF/UHF Duplexer DIY Kit for Satellite or Repeater QRP SMA

<https://www.ebay.com/itm/196090474164?>

73,

Mark - KA1INE

From the Editor's Desk

By Marla Wallace, WA1GSF

As the saying goes, 'If your antenna stays up all winter, it wasn't big enough'. Well, my antenna did not survive the first snowstorm of the winter. The sticky snow caused excessive shear stress on one of the fiberglass supports, which proceeded to snap off at the bottom joint. So, I'm off the HF bands until spring, I guess. Sigh.

The antenna was supported by slide-together six-foot sections of fiberglass tubes (army surplus tent poles). Three four-section masts made a dipole 24 feet in the air. But that puts an eighteen-foot lever arm applying torque to the first joint of the mast. And the joint just couldn't take the strain.

In the spring, I'm going to reconfigure the antenna as an inverted vee, with the end masts made from two six-foot sections instead. That makes the lever arm only six feet long, which should be better for the joint. And the ends of the antenna will still be at least twelve feet off the ground, so not a hazard.

It was fun while it lasted.

The Electronics of Radio

Marla Wallace, WA1GSF

Question: Why does a dipole cut for 40 meters also work well on 15 meters?

Answer: It has to do with the phase of the RF current in the antenna. A half-wave dipole is just that: it's $\frac{1}{2}$ the length of a single cycle at the frequency it's cut for. So, the current is maximum at the center of the dipole and minimum at each end. And at every odd harmonic of the design frequency, the current is maximum at the center of the dipole and minimum at the ends (though there are multiple maxima and minima along the way, as you can prove to yourself by drawing half a sinewave scaled to the length of the dipole and then another scaled to $\frac{1}{3}$ rd the length, another at $\frac{1}{5}$ th, etc). So long as the endpoints have minimum current and the center has maximum current, the dipole will work.

Forty meters is 7.0 to 7.3 MHz. Three times this is 21.0 to 21.9 MHz. And fifteen meters is 21.0 to 21.45, so an antenna cut for the low end of 40 should match just fine on 15.

It's unfortunate that our bands are mostly assigned in a 2:1 frequency relationship. If you try the scaled plotting I described above, you see that a wave at 2X the frequency "doesn't fit". But the 40-to-15-meter relationship is "magic". Offhand, the next pair of bands that play well together is 2 meters and $\frac{3}{4}$ meters, and they just barely overlap: 144.0 to 148.0 MHz is $\frac{1}{3}$ rd the frequency of 432.0 to 444.0 MHz.

Until next time, keep the questions coming.

Announcements

The Algonquin Amateur Radio Club Flea Market will be held on February 17, 2024 at the 1LT Charles W. Whitcomb School, 25 Union St, Marlboro, MA 01752.

Doors open to buyers at 9AM. General Admission fee of \$5.

Flyer can be downloaded from our website at <https://www.qsl.net/n1em/2024flyer.pdf>

There will also be a VE Exam Session at 9AM.

--de Ken - KA1GFN
Treasurer
Algonquin Amateur Radio Club

The next New England Vintage Electronics Expo will be held on March 3rd from 9 AM to 1 PM. See <https://www.nevec.org>. Admission before 9 AM is \$20 and from 9AM to 1PM is \$10. You will see cool old electronics there. Get in line early.

Castelton Banquet and Conference Center
58 Enterprise Dr
Windham, NH

This is sponsored by the New England Vintage Electronics Club, of which I am a member. If you want to sell there you need to be a member. Dues are cheap and the club puts out a great newsletter.

--de Jim N1HTS

Dear Friends of NEAR-Fest!

Due to an unfortunate scheduling conflict with the Deerfield Fairgrounds our Spring 2024 hamfest, NEAR-Fest XXXV, the main day of the hamfest will be Friday April 26th, 2024, and will end at 3:00 PM. This time only we will not be there on Saturday. Our 2024 Fall NEAR-Fest XXXVI scheduled for October 11th and 12th will be the same as always.

We hope to have some flea market and social activities on Thursday, April 25th. However, this is still being negotiated at this point in time so nothing is written in stone but here is what we anticipate.

Advance ticket holders will be admitted first (exact times to be announced) so you might want to buy your tickets EARLY online starting February 1st, 2024, on our Web site, www.near-fest.com, or in March at HRO in Salem NH and Ross Hochstrasser's Clock Shop in Whitman MA (cash only please) and get your favorite spot. Everyone else will get in one hour later.

Campers, RVs, and overnight stayers will go directly into the Fairgrounds as we will not be using the Fair's campgrounds for Thursday night this time.

For this event only admission per person is \$10.00 whether you buy your ticket online, in advance or at the gate. Overnight parking and tent passes are \$15.00 regardless of whether you plug into an electric outlet or not. All vehicles that remain at the Fairgrounds overnight (after 9:00 PM) will require an overnight parking pass in addition to an inside parking pass for Friday. An RV/Camper/Motorhome pass is \$30.00. Everyone over 21 will need an admission ticket except unlicensed spouses, active-duty military, full-time students (with ID) and other valid pass holders.

The gates will open Friday morning and buying and selling may commence immediately. We offer our long-standing Porter service; if you buy something big and heavy in the flea market one of our volunteer staff members will be glad to transport it and you to your vehicle at no charge as it has been for many years. As always inside parking for disabled persons is free of charge and they may use a single person 'mobility device' as well. NEAR-Fest reserves the right to limit the use of golf carts and 'other power-driven mobility devices' due to safety concerns and potential liability issues.

Please go to our Web site, www.near-fest.com, for exact opening times and any further updates. We apologize for any inconvenience that the abbreviated Mini-NEAR-Fest may have caused this time. We appreciate your indulgence and understanding.

See you at Deerfield!
73,
MisterMike, WIRC

Strays

Not Bad, for a Rookie

Not sure if this is newsletter-worthy but I just learned my final scores from the Sept. CQ WW RTTY contest. Turns out I did OK.

- #1 World / SOLP(ROOKIE)
- New NA Record / SOLP(ROOKIE)
- #4 All Time / SOLP(ROOKIE)

Without the overlay I finished #8 in NA / SOLP.
--de Tim Carter, K1DC

[Congratulations, Tim. Fine work! –ed.]

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 W1LUS@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

By the Numbers

Some funny numbers you might get, especially on CW, at the end of a QSO:

33 is see you later (between YL's, i.e.: YL to YL)

73 is see you later (anybody)

88 is see you later with more feeling 😊

Also, some abbreviations that are good to know:

OM = Old Man

YL = Young Lady

XYL = Ex-Young Lady (she's married, typically the OM referring to his wife)

--de Niece - KA1ULN

Making ZOOM available to Elmers

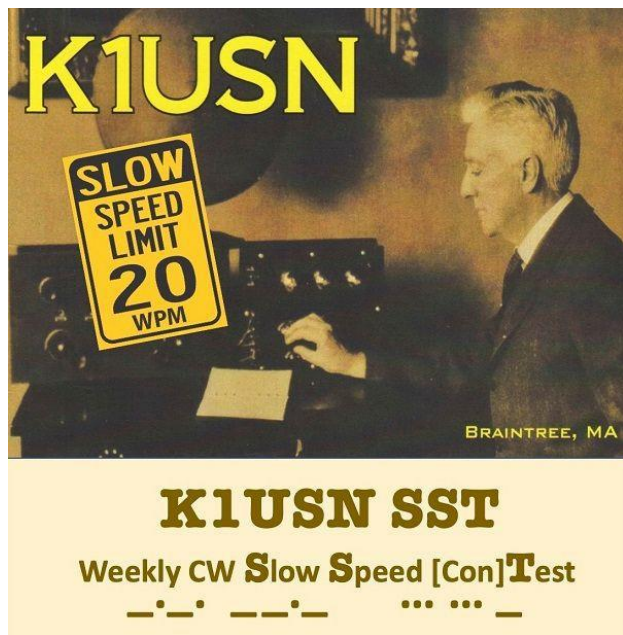
In this time of social distancing, we have been using Zoom for our monthly club meetings. I have been thinking that Elmers could also be using Zoom to coach new hams instead of actually going to visit with them. Elmers could perhaps help with programming a new radio with the new ham sharing their computer screen and the Elmer helping to walk them through the process. An Elmer could have Zoom on their cell phone and show a new ham how their shack was set up. 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 in 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).



-- de Tom Walsh, K1TW

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 the way online exams are run.

--de Bruce Anderson, W1LUS

Secretary's Reports

from Marla Wallace, WA1GSF, Secretary

There was no BARS General Meeting in January

The BARS Holiday Party was held in lieu of the meeting.

There was no BARS Board of Directors Meeting for January

BARS Membership

Our current combined membership is 124. To date only 64 of the paid-up members in 2023 have renewed for 2024.

We are now accepting renewals for 2024. For 2024, dues will remain at \$15.

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

2024 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 February 2024

We are now accepting renewals for 2024. For 2024, 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 January, we had income of \$315 from nine new/renewal. Our expenses were Zoom \$16.99, PayPal \$9.09 and 16.88 for our domain name. We now have \$1243.01 in the bank and \$650.17 in our PayPal account for a total of \$1893.18.

Bruce Anderson
WILUS

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 Doug Bruce, N1WRN.

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

Starting in February, club meetings will be held in person and via Zoom. A link will be sent via the BARS email reflector to all currently paid-up members.

Club meetings are held on the first Wednesday of the month at 7 PM Eastern time.

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 \(map\)](#)

VE Session Report for January

We had nobody show up for the January VE exam session.

Our next exam session will be at the Chelmsford Bible Church on February 8th at 7:00 PM. You may pre-register for BARS VE exams at <https://HamStudy.org>.

--de Bruce Anderson, WILUS

Club Breakfast every Saturday

On Saturday mornings around 8:30AM, we have a virtual Zoom breakfast session (a link was provided in email some time ago).

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

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

Future Meetings

The March meeting will be on 3/6 and will be hybrid – in person AND 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>
Feb 3-4	10-10 International Winter Contest, SSB https://www.ten-ten.org/index.php/activity/2013-07-22-20-26-48/qso-party-rules
Feb 4	North American Sprint, CW https://ncjweb.com/Sprint-Rules.pdf
Feb 10-11	CQ WW RTTY WPX Contest https://www.cqwxrtty.com/rules.htm
Feb 12-16	ARRL School Club Roundup http://www.arrl.org/school-club-roundup
Feb 17-18	ARRL International DX Contest, CW ** http://www.arrl.org/arrl-dx
Feb 24-25	North American QSO Party, RTTY https://www.ncjweb.com/NAQP-Rules.pdf

**** Top recommendation 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: Bill Poulin, WZ1L
BoD: Steve Wedge, W1ES/4
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