



# BARS Billerica Amateur Radio Society

## NEWS FOR AND BY BARS MEMBERS

MARCH 2025

**BARS meetings are now “hybrid” – the meeting will be held at the Chelmsford Bible Church and available simultaneously on Zoom.**

The safety and well-being of our membership is important to us. Those members who feel uncomfortable attending in person can continue to join us over Zoom.

--BARS Management.

## A Message from the President By Doug Bruce, N1WRN

Greetings Fellow Members,

I hope everyone is doing ok as we head toward March and Spring! I am looking forward to March 8, as that is the day that we return to Daylight Saving Time! It will be nice to have 7:00 and beyond sunsets until November! It will, however, reduce the nighttime DX windows some, especially as we get to May and June, with 8:45 sunsets as of June 21. Propagation tends to be not as good during the Spring and Summer months, so that is a good segue and a good reason to hone your FT8 skills. As I have said before, FT8 IS HAM RADIO!! It is a wonderful mode that allows some of us Little Pistol DX'ers to work some relatively rare DX stations with not a ton of power. It's all about knowing the propagation!

I have an exciting announcement regarding the B.A.R.S. website! Dave, KC1TLF, has agreed to be our Club IT Director and Website Administrator, and will work with Kayla W2IRY, to get the Club website into the 21 st Century! Dave has extensive experience in web hosting and web design, so I am very excited to have Dave join the Team here at B.A.R.S!!! We are looking to add Groups.io to the website, so that members can chat in real time with other members. I have had many members ask me about adding this feature, so the wait is over. Please feel free to email me or Dave (his email is good on QRZ) if you have any suggestions or have any ideas about what you would like to see from the website going forward.

In DX news, there are two rare stations now on the air, VK9XU Christmas Island, and 59NDTG Nigeria! Look them up on QRZ to find out about where they are working so that you can get into their log! DX Heat is a great real time resource to look up where and when these two DXpeditions are on the air! Again, propagation is the key, as is the time of day. You have to be on when THEY are on, not when it is convenient for you to be on, in order to work them. It is well worth the effort to get up at all hours of the night to work the rare DX stations!

Lastly, we are looking for input and operators to participate in a B.A.R.S. POTA Activation in the “Late Spring” before our Field Day activation in June. I have heard many folks show an interest in doing a POTA activation with the Club, so here is your chance. Please feel free to email with any comments and suggestions as we plan for this event.

As always, remember that we are a G.O.T.A. Club (Get On The Air!) so get on the radio no matter what mode and have some fun!

Until next time,

73,  
Doug  
N1WRN

**Next BARS meeting: March 5 at 7:00 PM -  
“The ARDEN Network”**

**Speaker: Jay Taft, K1EHZ**

We are pleased to announce that Jay Taft, K1EHZ, will be our Guest Speaker for the March 5, 2025, Hybrid Club Meeting at the Church. Here is a bit about Jay...Jay Taft K1EHZ is the President of the Merrimack Valley Amateur Radio Association located in Auburn NH. He has been actively promoting the use of AREDN, the amateur radio emergency data network between Maine, New Hampshire and Massachusetts. He will be presenting an overview

of the system which is an independent internet network mainly comprised of RF nodes. It does connect into the internet for redundancy and training purposes. He will be joining us at the March 5th meeting located at the Chelmsford Bible Church at 128 Gorham Street in Chelmsford at 7:00. Please join us and learn more about AREDN.



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](mailto: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 there on Wednesday, 3/5, at 1900.

Doug, N1WRN  
President, Billerica Amateur Radio Society

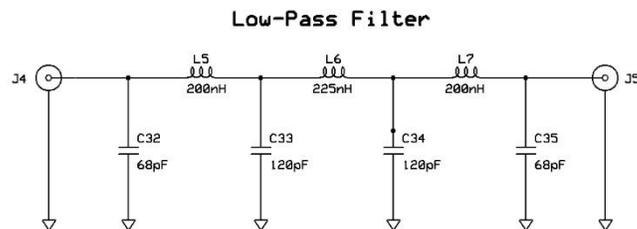
## From the Editor's Desk

### By Marla Wallace, WA1GSF

As I said last month, my brother Andy's article on HF beacon stations has inspired me to design a beacon transmitter for the six-meter band, which I hope to construct and put on the air in the next few months.

I've made some progress with the design, while also learning how to make use of the free LTSPICE program from Analog Devices. The program can be downloaded for Windows or Mac at <https://www.analog.com/en/resources/design-tools-and-calculators/ltspice-simulator.html>.

Here's the first installment of the design, the low pass filter.



#### Spice Analysis:

```

1/2 dB Insertion loss
2nd Harmonic is down >50 dB
3rd Harmonic is down >80 dB
4th Harmonic is down >115 dB
Flat within 1/4 dB from 50 to 54 MHz

```

```

L5, L7: 9T AWG #18 on 3/8", spread to ~1" length adjusted for value
L6: 10T AWG #18 on 3/8", spread to ~1" length adjusted for value

```

According to the analysis from LTSPICE, this filter should meet or exceed the harmonic signal attenuation requirements. The filter starts rolling off at about 56 MHz.

The capacitors are all silver-mica, 500VW and the inductors are wound with AWG #18 enameled copper wire. Everything will be constructed over copper-clad fiberglass PC board and each stage of the filter will be within its own shielded compartment. (I'll provide a photo when I build this, of course.)

Though the numbers look very good in the simulator, the component tolerances and the difference between ideal components and what you can actually buy may cause some surprises. We shall see...

## Strays

### 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.



## BARS Membership

Our current combined membership is 155. Renewal notices were sent out to the 22 members that haven't renewed for 2025.

Anyone with a question about their renewal status can email me at [WILUS@hotmail.com](mailto:WILUS@hotmail.com) to get your current membership status.

from Bruce Anderson, WILUS, Treasurer

## 2025 BARS Member Dues

A \$15 annual BARS membership begins on January 1<sup>st</sup> and expires on December 31<sup>st</sup>. Any renewal or new membership made after September 1<sup>st</sup> will be valid until December 31<sup>st</sup> of the following 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 2025

Dues for 2025 are now due. Dues for 2025 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](mailto:bars.dues@outlook.com),
- with credit card by using the Join/Renewal membership form on the W1HH.org website,
- or with cash or check by mailing \$15 to Billerica ARS, 16 Regis Road, Tewksbury, MA 01876

In February, we had six new/renewals, for \$90 income and \$20 from one new ARRL Subscription (thanks to Daniel KC1VWO); our expenses were Zoom \$16.99 and PayPal \$3.03. We now have \$646.69 in the bank and \$1829.08 in our PayPal account for a total of \$2475.74.

Bruce Anderson  
WILUS

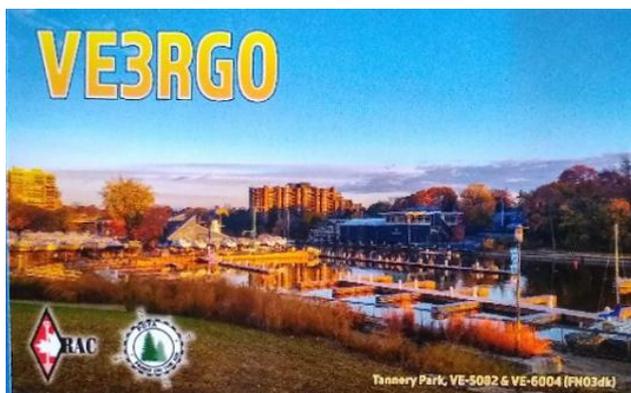
## BARS Does breakfast every Saturday.

On Saturday mornings at 8:15AM, we meet for a casual, social breakfast at Stelio's restaurant in Billerica.

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

## Photo Feature: From the Mailbag

John Fisher contributed four cards he got in the mail recently for this month's column. Despite having an indoor loop antenna, he manages to get on HF and does a pretty good job of working DX. Here's his latest:



What interesting/meaningful cards have you received? Send a scan of them to me (or to [k1dc.radio@gmail.com](mailto:k1dc.radio@gmail.com) who instigated this new column) and I'll share them with the group. Extra credit if they have a story to go with them!

## February Get-on-the-Air Suggestions from Marla Wallace

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

Here are some suggestions for this month:

<u>Date (UTC)</u>	<u>Event</u>
03/09	Wisconsin QSO Party <a href="http://www.warac.org/wqp/wqp.htm">http://www.warac.org/wqp/wqp.htm</a>
03/15	Virginia QSO Party <a href="https://www.qsl.net/sterling/VA_QSO_Party/2025_VQP/2025_VQP_Main.html">https://www.qsl.net/sterling/VA_QSO_Party/2025_VQP/2025_VQP_Main.html</a>
03/23	North American SSB Sprint Contest <a href="https://ssbsprint.com/rules/">https://ssbsprint.com/rules/</a>
03/29	<b>CQ WW WPX Contest, SSB **</b> <a href="https://www.cqwp.com/rules.htm">https://www.cqwp.com/rules.htm</a>

**\*\* 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 6<sup>th</sup> of every month at 1200 UTC  
[http://www.skccgroup.com/operating\\_activities/week\\_end\\_sprintathon](http://www.skccgroup.com/operating_activities/week_end_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 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 about 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

Club meetings are held in person (weather permitting) and via Zoom. A link will be sent via the BARS email reflector to all currently paid-up members who might wish to attend via Zoom.

Club meetings are held on the first Wednesday of the month at 7:00 PM Eastern time.

## VE Sessions

Our VE sessions are held in-person at the Chelmsford Bible Church. Pre-registration for our in-person exams is suggested. Contact [w1lus@hotmail.com](mailto: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 February 2025

We had five people show up for the February 13 VE exam session. Results were two new Technicians, Tyler KC1WFQ, and Keith KC1WFW, and two Extra upgrades. We had a second VE session on February 19 resulting in one new Technician, Ethan KC1WHH. Be sure to say hello if you hear them on the air.

Thanks to Gary W1GFF, Shawn N1CVO, and Bill W1ZL, for helping run this exam session.

Our next exam session will be on March 13<sup>th</sup> at 7:00 PM at the Chelmsford Bible Church. While walk-ins are still welcome it speeds the process up if you pre-register for your BARS VE exam session at [HamStudy.org](http://HamStudy.org).

--de Bruce Anderson, W1LUS

## Future Meetings

The next BARS General Meeting will be held at the Chelmsford Bible Church on April 2<sup>nd</sup> at 7:00 PM. A Zoom link will be sent in the club email feed prior to the meeting for those who would prefer not to attend in person.

## Subscribe to the BARS Mailing List

To subscribe to the BARS email list, send a blank email to [bars-subscribe@w1hh.org](mailto: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](mailto:bars@w1hh.org)

## 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