



NEWS FOR AND BY BARS MEMBERS

# BARS Billerica Amateur Radio Society

APRIL 2021

## BARS physical meetings are on hiatus until further notice.

The decision to resume in-person club meetings and breakfasts at Stellio's will be made entirely by the Board based on the outlook of this medical emergency. The safety and well-being of our membership is important to us.

Meanwhile, virtual club and breakfast meetings using Zoom have proved an enjoyable substitute. Please ignore the sections, below which give directions and schedule for in-person meetings.

VE License Exams are also virtual – see the VE section near the end of the newsletter for details.

--BARS Management.

## From the President's Desk

from the President of BARS, Doug Bruce

N1WRN...calling CQ!

I have been waiting a long time to be able to throw this call sign on the air! I would like to tell the story of my new vanity call sign here in my column this month.

As my Mother has gotten older, she has been sharing story after story with me during our visits at her house. She once told me that my Grandfather, George E.M. Bertram, was a Commercial Radio operator on the New York Boats of the 1910's and 1920's, which went from New York to Jamaica with the sole purpose of picking up a load of bananas and bringing them back to the Port of New York to all of the produce markets here. He evidently was quite versed in Morse Code, which was the communications mode of choice on the New York Boats of the time.

After learning this from her, I decided to reach out to my ham radio contacts and see if there was a way to look up his Commercial Radio License call sign, so maybe I could use a part of it for a possible new Vanity Call sign from the FCC.

One of my contacts replied to me that he had a couple of links to Amateur Radio Call Books from the 1920's, but not the Commercial Radio Operators that I was really looking for. I proceeded to open the .pdf file and do a search of the 967 page text by putting my Grandfather's last name in the search engine.

To my surprise and delight, the first entry that came up was for a George E.M. (Ellsworth Morrison) Bertram!!! He was in fact a ham radio operator in 1920!!! I then scanned across the page and saw his call sign, 1WR!!!! This was almost a religious and spiritual moment for me, as I could now use his call sign as part of a new vanity call sign, hence the creation of the Vanity Call Sign of N1WRN! I applied for this call sign on 3/3/21, and received the official grant from the FCC on 3/23/21.

I am so happy to continue his legacy in ham radio as I continue my lifelong ham radio journey. He will always be with me every time I key the mike and call "N1WRN calling CQ!" He would have been so proud!

On another historical front, the Club is moving full blast ahead with planning the Special Event Station to celebrate the 100th anniversary of WBZ AM 1030. We will be applying for three Special Event Call signs to use with the Event in September. We will be enlisting B.A.R.S. members for support as operators or to help with other related tasks, so be sure and email me if you are interested in this Special Event Station! We welcome one and all to help out! As it turns out, my Grandfather was issued 1WR before WBZ was issued their first call sign to be used in their new Springfield MA studios on September 19, 1921!

I hope that all of our members are staying safe and healthy as we get towards the end of the pandemic with the availability of the vaccines.

Until next month,  
73,  
Doug, N1WRN

## Next BARS Zoom meeting:

April 7 at 7:00 PM

“DMR Presentation”

Presenter: Bill Barber, NE1B

The next Club Zoom Meeting will be Wednesday 4/7/21 at 7:00 PM and our Guest Speaker will be Bill Barber NE1B. Bill will be doing a presentation on the DMR Digital mode. I am sure this will be a very interesting and informative presentation. Please be sure join us!



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 on Wednesday 3/3 here at 1900.

Doug, N1WRN  
President, Billerica Amateur Radio Society

## A Message From the Editor

from Marla Wallace, WA1GSF

Ah, the sweet smell of hot rosin!

My younger and much smarter brother, Andy, KA1GTT, sent me an email the other day in which he lamented that very few of the members of BARS seem to be interested in constructing their

own gear these days. Maybe it’s because of the availability of commercial rigs. Maybe it’s that after the demise of Heath Co. and their fabulous kits build-it-yourself has lost its luster. I would think that with the advent of the “maker movement” more hams would be discovering the joy of construction and the satisfaction of saying “I built this rig”.

There are a bunch of vendors of ham-related kits. One place to start your search is

[Ham Radio Kits - An Introduction With List Of Manufacturers \(hamradiosecrets.com\)](http://hamradiosecrets.com)

If you are more hard-core, you probably already subscribe to QEX from The League. This magazine is what QST of the 50s and 60s was full of – ham radio construction projects. Radio gear and accessory equipment designed by folks who have the experience and expertise.

If you are **really** hard-core, you can design your own gear. That’s what Andy and I are collaborating on: we are in the process of creating a six meter AM transmitter from scratch. If we succeed, the project might even appear in these pages. (Don’t hold your breath, though.)

## Feature Article: Serendipity

By Andy Wallace, KA1GTT

**SERENDIPITY:** the faculty or phenomenon of finding valuable or agreeable things not sought for

Several years ago, I was carrying my lunch tray across the cafeteria at work and overheard something amazing. Someone was complaining that someone “had a house so jam packed with boatanchor ham gear you could barely move in the place.” I did a double take and said to the stranger, “hey, I’m a ham and I like boatanchors!”

We introduced ourselves and I was amazed to find that in my RF design company, where hams do NOT seem to grow out of the woodwork like in the old days, I was face to face with not one, but two: Dan and Don Piantaggini, WA1KVJ and WA1KVK. They were twin brothers, to boot.

Thus began a hearty friendship which continues. Early on I learned that these fellows get on six meters, and not only that, six meter A.M.! At the time I had no station capable of 50 MHz. Their circle of friends would get on very early each weekend day, like 5 or 5:30 AM and chat things up groundwave. The reason

they got on before the roosters crowed was because they had neighbors with noisy solar panel inverters (now fixed).

My friend John Fisher, KC1FTJ, got the radio bug via his dad, Daniel J. Fisher, Jr.; John's dad got his license in the late 1950s - first as K2VYE, and later as K1DXO when the family lived in New London, CT. Unfortunately, Dan let the license lapse as family life got busy.

Being up in years, he was willing to let John find a good home for the small amount of gear he had in the basement. One prize was a well treated Heathkit Seneca VHF-1 transmitter. This was a 100+ watt capable rig for both 50 and 144 MHz. Being a kit, Daniel was the one who put it together and used it. Googling for Heathkits you will discover that the company went through many stages of naming and styling equipment. The Seneca was produced when Heath was making transmitters and receivers named Apache, Mohawk, Marauder, Comanche, Chippewa, Pawnee, and Shawnee. How many of you used those?

When I mentioned the availability it was Don who jumped for the ball first. Arrangements were made and BARS took the Seneca to the Boxborough ARRL convention flea market table. When Don picked it up he was thrilled to see how clean it was. Unlike lots of hams, Mr. Fisher did not modify the transmitter to improve it as years went on. To me this late-50s AM/CW transmitter, in its cream, green, and chrome livery reminds me of an antique car.

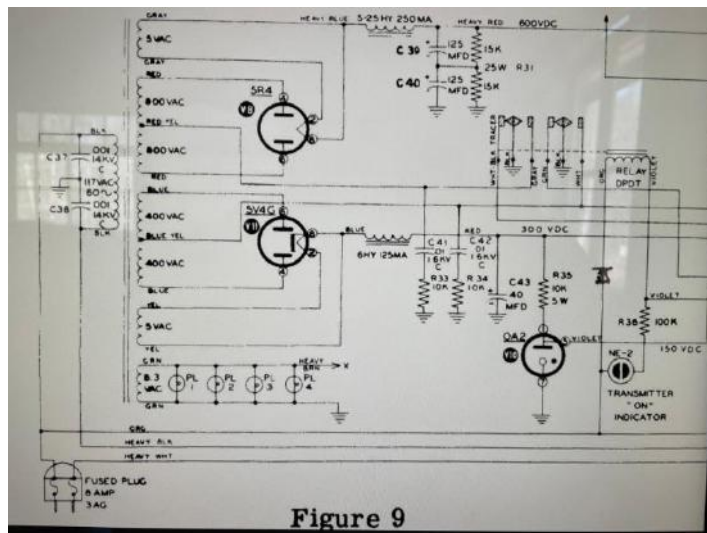


Don took the Seneca home and unfortunately life got in the way of looking into bringing it back to life again. He was finally able to do so in 2020 and being coworkers he and Dan emailed me many times to discuss what was being found and the progress they were making.

One of the first issues that cropped up was that the transmitter would rapidly increase current at the final amplifier tube, climaxing in a blown fuse. The twins put their heads together and used a Variac and a cobbled up circuit breaker arrangement to try

to capture the failure as it happened. Inspection centered around the clamp tube controlling the dual 6146 final output tubes.

Since Don suspected the current rise could be seen in the behavior of the power supply, he wondered if a short was developing inside the power transformer. That seemed to be not the case, however another important component of the supply was the 5-25 Henry "swinging choke" on the 600VDC high voltage line.



I had never heard of a swinging choke. A web search yielded this helpful explanation:

As current increases the core is designed to saturate, reducing the inductance. A swinging choke usually has two values: one indicates maximum inductance, and another showing the inductance at full rated current. The varying inductance improves the voltage regulation.

As brothers who have fixed a LOT of electronics, cars, mowers, snowmobiles, and motorcycles they have a knack for being creative when it comes to antique vacuum tube gear. An acoustic stethoscope was used against the swinging choke and a sizzle was heard! So that was the culprit.

Luckily Don had two "junkie" Senecas in his place. Anyone who works with tube gear likely sees the sense in buying rigs just for parts. Don swapped the choke into K1DXO's Seneca....and no more blown fuses!

I had bought an Icom IC-7300 and once I did I was capable (25W carrier, 100W PEP sidebands) of joining in on 6m A.M. Don texted me to try some on air tests and his new Seneca was putting out 65 nice sounding watts on 50.400!



Fast forward to March 6, 2021. I arranged for Don to surprise John with a QSO on 6M A.M. John was visiting my station for the SSB contest that weekend. I did not tell John that he would be hearing his dad's transmitter, on the air for the first time since the mid-1960s. John had heard from me that the rig was on the air again, but the surprise QSO put a real lump in his throat. He could not wait to tell his father about it. I even recorded it to the SD card in the Icom.

Don and John exchanged QSL cards for this QSO as well. Isn't that a wonderful twist of fate? If I had not overheard a radio comment in a cafeteria, John might have never heard his dad's old rig on the air.

And in the end, it was fitting that Don took the Seneca instead of me: I do not have a supply of junk Senecas, so if I had been lucky enough to troubleshoot to the swinging choke, finding one might have taken a very long time!

And a surprising epilogue to the story: Don and Dan took the other "junk" Seneca and has been working to bring that one back from the dead as well! They are trying to tame a strange "squegging" oscillation when certain crystals are used, but using the VFO it is now putting out another clean 60W amplitude modulated signal on six. Dan will eventually take ownership and the twin brothers will be using twin Senecas.

Listen in on 50.400 MHz at 5 or 6 AM Eastern on Saturday and Sunday mornings if you want to hear K1DXO's Seneca in action!

Andy  
KA1GTT

## Strays Found on the Web

What the heck is a Class F amplifier? Power amplifier designs have gotten more exotic over the years. Have a look into this technology at:

[Power amplifier classes - Wikipedia](#)

--de Marla Wallace, WA1GSF

## 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](mailto: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

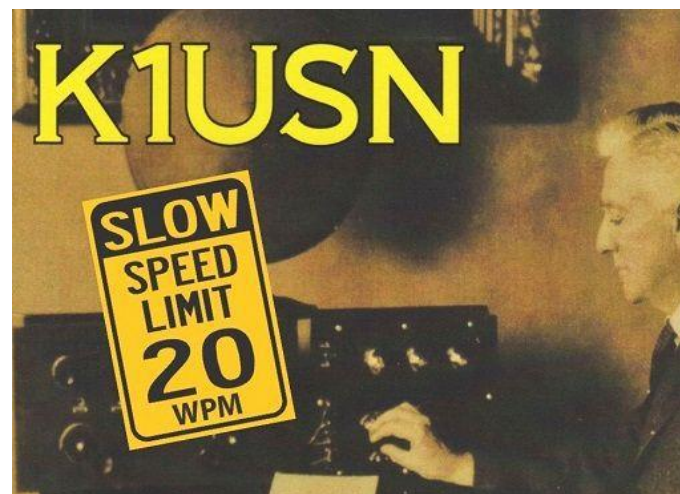
## Upgrading Your License? Here's a Resource

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

## 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 4-5 PM EDT Friday and 8-9 PM EDT Sunday. – ed.]



-- de Tom Walsh, K1TW

## Secretary's Reports

from Scott Ginsburg, K1OA, Secretary

### BARS General Meeting Mar 03, 2021

President Doug Bruce, KC1MJK called the Zoom virtual meeting to order at 7:05 PM.

Brian Gudzevich, WO1VES, gave a talk on the Yaesu System Fusion digital mode.

KC1MJK brought up the WBZ 100 year anniversary special operating event idea and solicited volunteers to help with the effort.

KC1MJK mentioned the idea of club members presenting their shack at future club meetings. There was general interest in the concept.

There were 28 attendees. KC1MJK closed the meeting at 8:42 PM.

### BARS Board of Directors Meeting, Mar 18, 2021

Board Members present: KC1MJK, W1LUS, KA1GTT, WA1VAB, K1OA

Henry, WA1VAB presented the idea of the club offering CW classes via Zoom.

The WBZ 100 year anniversary special operating event idea was further discussed and various ideas and a potential timeline was laid out.

## BARS Membership

Bruce, W1LUS, our BARS Treasurer reports that as of 3/1/2021, we had 108 members. To date 78% of 2020 members have renewed for 2021

### 2021 BARS Member Dues

The BARS Board has changed the policy on member dues. A \$15 annual BARS membership now runs from January 1<sup>st</sup> and expires on December 31<sup>st</sup>. Any renewal or new membership made after September 1 will be valid until December 31<sup>st</sup> 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 2021

from Bruce Anderson, W1LUS, Treasurer

For March, our expenses were Zoom \$15.93, and a PayPal fee of \$3.70. We had 5 new/renewals for an income of \$75 plus

donation of \$3. We now have \$381.63 in the Bank and \$1136.18 in our PayPal account for a total of \$1520.75.

Dues for 2021 are due starting January 1, 2021. Dues will remain at \$15 for 2021.

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.
- With cash or check by mailing \$15 to Billerica ARS, PO BOX 832, Nutting Lake, MA 01856

## 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 Chris, KC1IUK. 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 Billerica 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**).

Repeater info:

147.12 MHz  
+600 kHz (normal) offset  
Encode CTCSS 103.5 Hz

## Club Meetings

When we resume in-person meetings, they will be held on the first Wednesday of the month at 7:00PM 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](#)

## VE Sessions

We started doing only online exams in December. Our next online exam session will be on April 8<sup>th</sup>. If you are interested in participating in these sessions as a candidate or as a VE, please contact Bruce at [W1LUS@hotmail.com](mailto:W1LUS@hotmail.com) to register for this online exam session.

Eventually, we hope to resume holding VE sessions as before, 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 \(map\)](#)

### March 2021 VE Session

On March 11 we had our fourth online VE Exam session. We had four people signed up and three passed their Technician exam. The fourth just missed an Extra upgrade. Our next session will be on April 8, 2021. If you are interested in taking an online exam or assisting with an exam contact me at [w1lus@hotmail.com](mailto:w1lus@hotmail.com).

I would suggest that anyone considering taking an online exam use the exam prep site HamStudy.org for practice as that is the same site that is used to generate the online exams.

Thanks to Scott, K1OA, Andreas KC1NTL, and Niece KA1ULN, for their help in running the session.

I am looking for more VEs to help run the online exams. With more VEs we can run more than one session a month. Since most exams are for Technician, General VEs can participate. And there is a possibility for non VEs to participate. Contact me for more information.

Bruce Anderson, W1LUS

### Club Breakfast every Saturday

On Saturday mornings around 8:15AM, we also meet weekly for a casual, social breakfast at Stelio's restaurant. [Stelio's Family Restaurant, Billerica, MA](#) Note: currently in hiatus due to COVID restrictions.

### Future Meetings

The 5/5 meeting will be held via Zoom.

### 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)

### April Get-on-the-Air Suggestions

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 popular suggestions for this month:

Date	Event
Apr 4	North American SSB Sprint Contest <a href="http://ssbsprint.com/rules/">http://ssbsprint.com/rules/</a>
Apr 10-11	Straight Key Century Club (SKCC) Weekend Sprintathon <a href="https://www.skccgroup.com/operating_activities/weekend_sprintathon/">https://www.skccgroup.com/operating_activities/weekend_sprintathon/</a>
Apr 16-17	Holyland DX Contest <a href="http://www.iarc.org/iarc/#HolylandContest">http://www.iarc.org/iarc/#HolylandContest</a>
Apr 18	ARRL Rookie Roundup, SSB ** <a href="http://www.arrl.org/rookie-roundup">http://www.arrl.org/rookie-roundup</a>
Apr 24-25	10-10 International Spring Contest, Digital <a href="http://www.ten-ten.org/index.php/activity/2013-07-22-20-26-48/qso-party-rules">http://www.ten-ten.org/index.php/activity/2013-07-22-20-26-48/qso-party-rules</a>

### \*\* Top Recommendations for this month

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

President: Doug Bruce, N1WRN  
Vice President: Kayla Creamer, W2IRY  
Treasurer: Bruce Anderson, W1LUS  
Secretary: Scott Ginsburg, K1OA  
Net Coordinator: Chris Lobdell, KC1IUK  
Newsletter Editor: Marla Wallace, WA1GSF  
New Member Outreach: John Fisher, KC1FTJ  
BoD: Mike Raisbeck, K1TWF  
BoD: Henry Christle, WA1VAB  
Ex Officio: Andy Wallace, KA1GTT

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