

Amateur Radio - Communicating Worldwide for A Century

Newsletter of the Boston Amateur Radio Club
Serving Hams in the Greater Boston Area

May 2022 - VOLUME 34, NUMBER 5 www.barc.org - w1bos@arrl.net



The President's Pronouncements - Brendan Baldonado, NW1S



Welcome Summer Time!

As the weather continues to improve the Club intends to host more On The Air (OTA) events! Don't forget to look at our website for updates and the calendar for specifics. If you want to host an event, or have an idea for an event you'd like to participate in, just email an officer and we can put it in the calendar. Planning to do a Parks On The Air or Summits On the Air? Use our email reflector at Groups.io to see if fellow members would like to join or solicit contacts. We we are currently planning to host Field Day in Westwood, MA. Our next meeting is going to be focused on logistics and details, log on to Zoom and come see what all the fun is about.

Message from the Editor - Doc Kinne, KE1ML / M7RCK

I also will echo the sentiments you'll read below from our current President, Brenden with regard to our upcoming elections. It take a village to run an effective organization, but, when you get right down to it, with the right help, it doesn't take a village of geniuses.

I don't say this in any sort of disparaging way, please don't misunderstand me. It seems to me that a good portion of today's society is being told very different things. It can be argued that we are being given trophies for just showing up in a lot of ways. As a teacher I heard this more than once.



On the other hand, I get the impression at times that we as a society are also being told that if we don't think we can end up being Magnum Carlson, Bill Gates, or David Beckham at something, why even try?

The truth, I think, as with many things, is somewhere near the middle. Some effort does need to be made to succeed at anything you try at, but it's also OK if you don't end up being Bill Gates.

Repeaters: 145.230 (-) CTCSS 88.5 in/100.0 out Simplex: 147.420 449.175 (-) DMR CC1

What does this have to do with Club Elections? Well, it doesn't take Hiram Percy Maxim to be an officer, or to head up a department, for BARC. I *constantly* remind people that Clarence Tuska was a teenager (19) when he became Secretary to the ARRL and started *QST*.

All it takes is will – the want to make a difference. The issue is that it takes a lot of us with just a little will, instead of a few of us with iron wills.

Think about it this election season. The water is pretty OK here in the pool, and with more of us, it'll get warmer.

BARC General Meeting - Thursday, May 19, 7:30PM

BARC will be holding a General Meeting on Thursday, May 19, at 7:30 p.m. on the Zoom teleconferencing platform. We will be discussing plans and details of our upcoming Field Day Plans!

To join the Zoom meeting above go to:

https://zoom.us/j/99918732995?pwd=cFhSbmwySUQ2Qi90eGVUNFNhQ0N4Zz09

Meeting ID: **999 1873 2995** Password: BARC

In this Issue of The SPARC

• SPARC Your Knowledge: The Questions

- The Upcoming BARC Election
- Member Stations
- SPARC Your Knowledge: The Answers

BARC's Online Discussion Group - Joe Harris, N1QD



BARC has an online forum at Groups.io. The group serves as a sounding board for members to post their suggestions and comments, and is intended to foster

discussion. The group can also be used to share photographs from club events! Come visit us at: https://groups.io/g/BostonARC. You can join, if you're not already there, by sending an email to "BostonARC+subscribe@groups.io.



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SPARC Your Knowledge: The Questions – Brendan Baldonado, NW1S

SPARK your knowledge! Each Month we will include three questions from the Technician, General and Extra exams. The correct answers will be in a separate area of the Newsletter and a small explanation as to why. Beginning June 2022 the National VEC has published new questions, beginning this volume of 'Spark Your Knowledge' we are featuring the new Technician test pool questions.

Technician: What is the approximate velocity of a radio wave as it travels through free space? [T3B11]

- A. 150,000 kilometers per second
- B. 300,000,000 meters per second
- C. 300,000,000 miles per hour
- D. 150,000 miles per hour

General: What is likely to happen if a transceiver's ALC system is not set properly when transmitting AFSK signals with the use radio using single sideband mode? [G4A14]

- A. ALC will invert the modulation of the AFSK mode
- B. Improper action of ALC distorts the signal and can cause spurious emissions
- C. When using digital modes, too much ALC activity can cause the transmitter to overheat
- D. All these choices are correct

Extra: What is a characteristic of a switching electronic voltage regulator? [E7D02]

- A. The resistance of a control element is varied in direct proportion to the line voltage or load current
- B. It is generally less efficient than a linear regulator
- C. The controlled device's duty cycle is changed to produce a constant average output voltage
- D. It gives a ramp voltage at its output

The Upcoming BARC Election-Brendan Baldonado, NW1S

Our next couple of meetings will be business focused, with the resurrection of a larger Club Field Day and then Club Officer Elections in June. As current President I am officially planning to run for re-election. As president my goals currently, and in the future. remain the continual growth and betterment of the club. I wish to find and secure a meeting space location for our monthly meetings, and for physical in-person elmering to take place. I want to start hosting license classes and begin holding VE sessions again, all with the intention of growing our club membership.

Part of these activities are to grow our membership and provide resources for our current, long standing members. This growth will build a sustainable and vibrant ham radio club right here in our fair city of Boston. We have a large opportunity to achieve this given the level of higher education, high schools and hams that are in the metro Boston area. We have many Hams in our club that have done over and above their fair share of time and efforts into making this club the great club that it is, but as they say it takes a village.

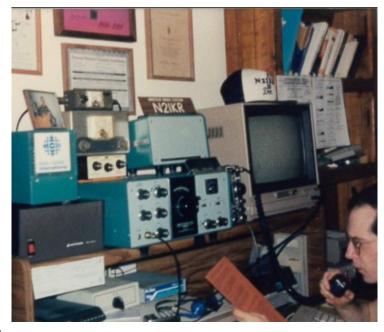
If you want to help, start small such as offering to help on Field Day. We will all need to chip in to make some of these projects work. If this is the direction you hope to see the club move toward I hope I can count on your vote not only at the June meeting but most importantly with Club engagement.

Member Stations - Doc Kinne, KE1ML / M7RCK

It was interesting. I thought I had these pictures somewhere online, but it turned out I didn't. I had to scan these in from the original photographs, which is one reason this issue is late this month.

I decided to go "old school" for my Member Station. This was station N2IKR, originally raised in Cazenovia, NY, right near the geographic center of the state. My Elmer was my first professional boss out of college, then WA2EXJ (Now WD2N). One day he basically asked if I wanted to do computer Bulletin Board Systems off the air, for free. Six months later I had my license.

Remember, in those days (1989) you took your exam and you knew whether you passed it or not, but even if you did pass it, it then took the FCC6-8 weeks for them to physically send you your license, which had your call letter on it. You would not know what your callsign was until you got that letter from the FCC. No looking it up online.

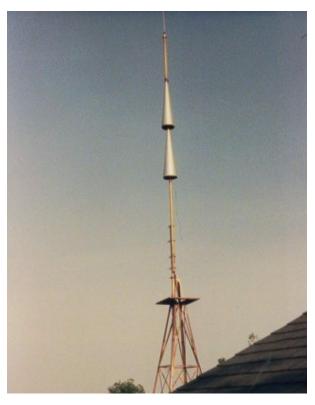


So in the interim between passing my exam and actually getting my license, Randy and I went to the Rochester Hamfest, which wonderfully doubled as the ARRL Atlantic Division Convention. The Flea Market was an eye-opener! In order to finance my first station, I sold my Osborne-1 CP/M "luggable" computer.

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Once that sold at the flea market, I managed to find a Kenwood All Mode TR-9130 mobile 2m radio. It had an output of 25w. I still have it, in fact.



I also picked up a discone 2 meter antenna. Still waiting for my license, these things came home with me, and I very nicely set them up. The discone antenna I managed to set up on the flat roof of my apartment on what I called a small oil derrick that was weighted to the roof with sandbags. I neither remember where I found the oil derrick base, nor do I remember what happened to it. I *think* I left it on the roof in Cazenovia when I moved. Satellite photos of the place show it is no longer there.

With the TR-9130 set up, I could at least listen to local transmissions and repeaters. This is how I found the Oneida County Traffic & Emergency Net and Traffic Handling. The mode that had brought me into Amateur Radio – Packet – would remain waiting for some months before I got onto it. My very first Amateur Radio transmission was checking into OCTEN one evening at 18:30 hours. I would get the Packet station up and running, however, as the PAC-COM TNC below everything else in the photo, something I built and soldiered myself, in fact, attests.

It would take a few years before I moved my license class up. Amateur Radio's technical aspects were never a problem, but CW was never a strength of mine at all and in those days it was still a requirement. In

order to motivate me, WA2EXJ gave me his Heathkit HW-101. Laying a half-wave G5RV antenna on the rooftop enabled me to listen in on shortwave transmissions.

So that comprised my first station 34 years ago.

What was your station like? What is it like now?

SPARC Your Knowledge: The Answers – Joe Chapman, NV1W & Brendan Baldonado, NW1S

Technician:

This is a very useful number to know! This is the speed of light; approximately. This number can be used to calculate a few different things for Ham Radio, specifically which Band a frequency is on. If you take the speed of light and divide by the frequency you get the approximate band in meters.

An example would be 446.00 would be 300/446=.67 or the 70cm Band. Or 146.52; 300/146.52 = 2.047 or the 2 meter band. Notice the number are not exact because the band name typically has a little room on each side.

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General:

Improper action of ALC distorts the signal and can cause spurious emissions The Automatic Level Control (ALC) makes sure signals do not clip by compressing them. The compressed signal is very similar to the original signal, but it usually adds in a bit of distortion. In voice modes the distortion is not typically noticeable but in digital modes the compression can lead to unwanted emissions and tones, making it difficult for others to decide your signal.

Extra:

In electronics, voltage regulators maintain a constant output voltage. A switching electronic voltage regulator turns the device on and off multiple times per cycle in order to lower the voltage. The design variables are the number of times it turns on and off, and the length of time it is on or off. So a switching electronic voltage regulator switches the power on and off in order to to maintain a constant output voltage.

BARC Meeting Calendar for 2022

We are in the process of looking at and garnering physical meeting space hopefully for the Winter onwards, again, depending on developing conditions. Watch this space, and the BARC Website (https://barc.org) for up to the minute details.

Unless otherwise noted, all meetings will take place via Zoom.

General Meetings (* Business/General Meetings)

June 16 2022 Thu 7:30 pm - Elections

VE Sessions

None scheduled at this time.

BARC Net Preamble

The control operator for the BARC Net is Joe, W1JJF. He rarely misses a net, but when he does any ham can take up the position and run the net. To assist you in opening and closing the net The BARC Net Preamble is printed below. Do not be afraid to step up and take the challenge.

Is there any further business for the repeater before we begin the Boston Amateur Radio Club Net? This is **«YOUR CALL»**. Calling the Boston Amateur Radio Club Net. This is **«YOUR CALL»**, my name is **«YOUR NAME»** and I am located in **«YOUR TOWN»**. This net meets each Monday evening at 9 pm Eastern Time on the 145.230 Boston repeater, PL 88.5. This net is an informal round table discussion concerning matters of interest to the members of the Boston Amateur Radio Club and the Boston Amateur Radio community in general. When checking into the net, please say, "this is" and drop your carrier to check on doubling. Then give your call sign, name and location. All amateurs are welcome to join the net. Any check-in's for the Boston Amateur Radio Club Net please call now.

[Compile the list of the check-ins and proceed with the net.]

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Is there any further business for the net before I close? Hearing nothing, this is **«YOUR CALL»** closing tonight's session of the Boston Amateur Radio Club Net. I would like to thank everyone who participated in the net and those who stood by while I ran the net. The Boston Amateur Radio Club Net will return next Monday evening at 9 pm Eastern Time. This is **«YOUR CALL»** returning the repeater to general amateur use. 73.

I See the Future

4-5 June ARRL International Digital Contest

11-13 June ARRL June VHF Contest
11 June SPARC Article Deadline
16 June BARC June Meeting
18 June ARRL Kids Day
25-26 June ARRL Field Day

▲ Note change from usual date and/or location

Before going to any event over the next few months, please confirm that the event will take place and what the hours are.

As you might expect, there are many more events (public service, hamfests, flea markets, etc.) taking place—some only peripheral to ham radio. For information on these, covering much of the Northeast, the "Ham - Electronic Flea Market" and the "PSLIST" lists tell the story. Of course, if you know of an event that would be of interest to the readers, please let the Editor know.

For an up-to-date calendar of events, including web links, visit http://www.barc.org/calendar.

Businesses Can Advertise Here

The SPARC accepts commercial advertisements. BARC encourages monthly promotion of your products and services which would be of interest to hundreds of our members and others interested in the Amateur Radio Service.

The rates for display advertising are:

 $1 \text{ col} \times 2 \text{ in. (business card)}$ \$15 per issue

 $1 \text{ col} \times 2 \text{ in. (business card)}$ \$75 per 6 consecutive months $1 \text{ col} \times 2 \text{ in. (business card)}$ \$125 per 12 consecutive months

 $1 \text{ col} \times 4 \text{ in.}$ (½ column) \$30 per issue $1 \text{ col} \times 9.5 \text{ in.}$ (full column) \$60 per issue

Originals of ads must be presented to the Editor in MS Word or .jpg format to print 1:1. Other composition will be at extra cost. We will be glad to quote other ad sizes and durations. Members are urged to seek prospective advertisers who are appropriate to our readers. For additional information, contact Doc Kinne, KE1ML, at 617.297.2718 or kinnerc@gmail.com.

Two Ways to See Yourself in Print! (well, PDF) - Joe Chapman, NV1W

We are always looking for articles for the newsletter. I have reserved this space for your articles, reviews, tips, howtos, hints, kinks, photos, schematics, or other ham related information. Photos of you operating or your shack are especially welcome. Send your submissions to the Editor, Doc, KE1ML, at kinnerc@gmail.com. Articles for the September issue must be received by September 6.

Are you a depressed BARC member because you have a treasure you must turn to cash? Cheer up, Bunky! The SPARC will run your (non-business) ad for free. Of course, a 10% donation if you sell it will be cheerfully accepted. Just send your ad to Doc Kinne, KE1ML, kinnerc@gmail.co

BARC Officers and Staff

President: Brendan Baldonado, NW1S brendan.baldonado@gmail.com

Vice President: Joe Harris, N1QD

n1qd@n1qd.org

Secretary: Joe Chapman, NV1W

nv1w@arrl.net

Treasurer: Jim Clogher, N1ICN,

n1icn@arrl.net

kinnerc@gmail.com

Volunteer Exams:

Jim Clogher, N1ICN, n1icn@arrl.net Linda Blair, NA1I, na1i@arrl.net

Public Service Coordinator: Ethan Hansen, KC1OIP

Public Information Officer: Geri Duff, KB1ISG

781.749.7664; geriduff52@juno.com

Membership Services: Linda Blair, NA1I

617.500.4406; na1i@arrl.net

The Boston Amateur Radio Club is a non-commercial association of persons interested in the Amateur Radio Service. The Club is organized for the promotion of interest in Amateur Radio communication and education, for the establishment of emergency communications in the event of disasters or other emergencies, for the advancement of the radio art and the public welfare, for the representation of the radio amateur in legislative and regulatory matters, and for the maintenance of collegiality and a high standard of conduct.

The Club is open to all persons interested in Amateur Radio without regard to race, color, religion, creed, national origin, gender, SPARC Newsletter Editor: Doc Kinne, KE1ML / M7RCK disability, or sexual preference. Our General and Business meeting locations are handicap accessible. Other meeting and activity locations may be handicap accessible by arrangement.

> The Club is an ARRL-affiliated club, and is a member of the New England Spectrum Management Council (NESMC). The Club is also an associate member of the Courage HandiHams system.

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Greater Boston Net Directory

Daily 7 pm	MARI (Mass/Rhode Island CW Net) (NTS)	3.565
Daily 8 pm	Eastern Mass 2M Traffic Net (NTS)	145.230 (PL 88.5 in/100.0 out)
Daily 8 pm	Slow Speed CW Net	28.160
M,T,F,S 8:30PM	Massachusetts Rhode Island Slow Net	3598
First Mon 8:30 pm	EMA Section ARES Net	146.610 and all MMRA links
Mon 8 pm	New England DMR Net	DMR New England Talk Group (TG 3181)
Mon 9 pm	BARC Club Net	145.230 (PL 88.5 in/100.0 out)
Sun Mon Wed Fri 10 pm	Heavy Hitters Traffic Net (NTS)	MMRA-linked repeaters: 146.610, 146.670, 146.715, 146.820, and all 222 and 440 repeaters
Mon-Sat Sat, 5 pm	MA RI Phone Net (NTS)	3.978
Tue 8 pm	Sci-Tech Amateur Radio Society (STARS) Net	446.325 (PL 146.2)
Tue 8 pm	MMRA Club Net	146.610 and all MMRA links
Wed 8 pm	Wellesley Amateur Radio Society Net	147.030; 444.600 (PL 88.5)
Wed 9 pm	Waltham Wranglers Swap Net	146.640 (PL 136.5)
Thu 8 pm	Wellesley Amateur Radio Society Net	28.3MHz
Sat 9 am	Northeast SATERN Net	7.265MHz
Sun 9:30 am	Yankee SSB Net	50.275MHz
Sun 8 pm	Algonquin Amateur Radio Club Net	446.675 (PL 88.5)
Sun 8:30 pm	NSRA Net (with Newsline)	145.470 (PL 136.5)
Sun 9 pm	CAARAnet	145.130 (PL 107.2)