



The SPARC

Amateur Radio - Communicating Worldwide for A Century

Newsletter of the Boston Amateur Radio Club

Serving Hams in the Greater Boston Area

September 2017 - VOLUME 29, NUMBER 9

www.barc.org - w1bos@arrl.net



President's Message – Joe Harris, N1QD



The 2017/2018 meeting season kicks off in September. From now until June, the Boston Amateur Radio Club will be meeting monthly for social and informative gatherings. Each month is a new opportunity for those in the Boston area with an interest in radio to gather for an evening and meet with other like-minded individuals.

While all meetings involve a time for socializing with friends, and a brief section of club business, we try to host a featured speaker at each meeting. These presentations change things up every month, and give folks an added reason for making the trip into Brookline. As president, the job of finding speakers has fallen to me for the past few years. This year, I'm asking for some assistance. Do you have a topic you'd like to present to the club, or do you know someone that would make a great guest speaker? Have you been working on an interesting project that you'd like to share? If you've answered yes to any of these questions, please contact me at n1qd@n1qd.org, and let's make the 2017/2018 BARC season a memorable one!

See you at the club meeting!

Joe Harris, N1QD

In this Issue of The SPARC

- Frog Sounds!
- Field Day Wrapup
- Business Meeting Minutes
- Events, meetings, directions



Next BARC General Meeting

Thursday, September 21, 2017 at 7:30 pm

The next BARC General Meeting will be on Thursday, September 21, 2017, at 7:30 p.m. at Brookline Police Headquarters in Brookline. Directions to this location can be found elsewhere in this issue and on the web at <http://barc.org/directions-to-brookline-police-headquarters-brookline/>.

Repeaters: 145.230 (-) CTCSS 88.5 in/100.0 out

Simplex: 147.420

449.175 (-) DMR CC1

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BARC's Online Discussion Group – Joe Harris, N1QD



BARC has an online forum at Yahoo groups. The Yahoo 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: <http://groups.yahoo.com/bostonARC>.

Equipment Review: Frog Sounds – Joe Chapman, NV1W

According to the playwright Aristophanes, ancient Greek frogs went, “Brekkekekek! Coax, coax!” presumably as a choral commentary on some cable-coiling infraction committed during teardown at the Dionysian Field Day. Continuing the tradition of ranine ham equipment there now comes a 1.8 watt QRP CW transceiver kit from China called, hitherto inscrutably, Frog Sounds.

I found mine on eBay for nine dollars and change, including free shipping from China, and within a week a small white packet showed up with a printed-circuit board and a few bags of parts. The board was well made and had clear component labels silkscreened on. Ominously, there was no documentation, or indeed any paper at all in the packet. So, before I fired up the soldering iron, I fired up the Google.

It took a little searching, and I was unable to find instructions that matched the exact revision of the kit I had. The English appeared to have been machine-translated from Chinese, with some things left untranslated. I now know that the character for 'Europe' also means 'Ohm'. And from the operating tips, this means 'sked': 'The selection disturbance is relatively small, spread the good opportunity for communication experiment, it is best to make an appointment with your friends communication.'

I sorted the parts and matched them up with the bill of materials. There were a lot of extra small components, and one toroid core was missing. Under the circumstances I didn't have a lot of hope for getting a replacement sent from China; fortunately the toroid was common and cheap, and I had to place an order for some miscellaneous parts anyway.

The silkscreen was clear, and the kit went together fairly rapidly. Resistors were all mounted hairpin fashion, vertical with respect to the circuit board. Electrolytic capacitors were marked as half-full circles, and I assumed the filled-in half was negative, though I was careful to check that using the schematic and a multimeter. As the Oracle says, “Electrolytic capacitor positive and negative polarity, insert the PCB board installation, make sure that the positive and negative corresponding correct, do not install the wrong.”

There were two toroids to wind, and neither was very hard, though the recommended lengths of magnet wire were far too short. I added an extra few inches (there was plenty of wire in the kit) and I'm glad I did. Oddly, the insulation on the magnet wire was not the usual stuff you can burn off with a bead of solder. I had to scrape it off with an X-acto knife and sandpaper.

One mod I made was to socket the two crystals using 0.10 inch female Dupont-style headers. The supplied crystals are 7.023 MHz, so I'll probably replace them at some point with a more common QRP frequency. The Arduino book by Glen Popiel that was reviewed in these pages also has a way to replace the crystals with a DDS.



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Finally it was time to try everything out, and 7.023 MHz was dead, though I was at least able to verify that I was putting out a good two watts. Obviously I need to make an appointment with my friends communication. Then it will be time to break out the ancient Greek Morse Code chart and send “Brekkekekek! Coax, coax!”

Frog Sounds 1.8W QRP CW Kit. Available from various sellers; check www.ebay.com. Price about \$10.00 including shipping.

Member News – Joe Chapman, NV1W

BARC picked up a few new members over the past month. Welcome to **Patrick Colvario, KC1FUH**, who holds a Technician license and lives in Arlington. Welcome also to **John Gilbert, K1JWG**. John is a recently licensed General from Somerville who's busy setting up a low power HF station utilizing an Elecraft K2 and a 51 ft. G5RV inverted V dipole. Finally, **Shad Wahab, KI6FJS**, a Technician who lives in Medford, has already been to a meeting!

An old friend, **Mike Silevitch, K1PEV**, has re-joined BARC after a long absence. Mike is a professor at Northeastern and is the trustee of the club station W1KBN.

Minutes of the September, 2017 Business Meeting – Joe Chapman, NV1W

The Boston Amateur Radio Club held its quarterly business meeting on September 7, 2017, at Brookline Police Headquarters. Members in attendance: K1PEV, KB1EKN, KB1ISG, KI6FJS, N1ICN, N1QD, N1GTB, NA1I, NV1W, WA1IDA.

The meeting was called to order by President Joe Harris, N1QD, at 7:41 p.m.

Officer reports:

- Joe, N1QD (President) reported that Gary Schwartz, N1ZCE, will be speaking at the November meeting on radio programming, but that we have no other speakers yet lined up for the fall. A discussion was held on speakers and members offered suggestions.
- Mark Duff, KB1EKN (Vice President) had no report.
- Jim Clogher, N1ICN (Treasurer) reported that we have \$2617.98 in the checking account and \$1850.92 in the repeater fund.
- Joe Chapman, NV1W (Secretary) reported that the website has now been live for a few months and seems to be doing well. He's also been doing some cleanup on the template used for the SPARC.

Committees:

- Repeater: we have received a donation of an isolator for the VHF repeater which Joe, N1QD, has tested and found to perform very well. The isolator is in a desktop cabinet, and N1QD noted that we could use the shelf the repeater is currently sitting on for it if we were to rack-mount the repeater. A motion to spend up to \$250 from the regular account to buy the rack-mount hardware passed. Mark, KB1EKN, noted that we have backups for the repeater, duplexer, and antenna, so we're well insured against disaster.
- Public service: upcoming events were announced.
- Membership services: no report.

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Old business:

- A recap of Field Day was presented. Joe, N1QD, noted that we made more contacts and earned more points than any Field Day, based on records going back to 2000. Mark, KB1EKN, said that we need to clean and adjust the beam antenna before next year, and said this should really be done this fall. A motion to donate \$100 to the Bare Cove Fire Museum in recognition of their graciously hosting us over the past decade was passed.
- The alternate meeting location in Jamaica Plain and possible solutions to the problems we have with meetings in the winter months were discussed.

New business:

- Bob, WA1IDA, suggested sending a meeting notice for the business meetings soliciting topics for discussion three weeks before the meeting. Joe, NV1W, will do this for the December meeting.
- Mark, KB1EKN, suggested that we make a donation to N1MM since we use it heavily at club operating events. It was not clear whether the N1MM team wants donations; we will research this. Discussion was tabled until December.

The meeting was adjourned at 9:10 p.m.

Respectfully submitted, Joseph Chapman, NV1W, Secretary

Field Day Wrap-Up – Joe Harris, N1QD

I want to preface this year's Field Day write-up by recognizing the tremendous effort that Mark KB1EKN contributes to the event annually. It is because of it this that BARC's Field Day happens at all, and it is the main reason that we are successful. His countless hours of preparation for the event start, quite literally, the day after Field Day ends when he is putting everything away into storage, so that it is easily found the next year. His labors continue throughout the year, ramping up as June approaches, and they hit a fever pitch the week leading up to the event. This work often goes unreported, but it does not go unnoticed. Thank you, Mark!

On the fourth weekend of June, the Boston Amateur radio Club held their annual Field Day event. For the ninth year in a row, the club operated out of the Bare Cove Fire Museum in Hingham. For the second year running, BARC was joined by the Harvard Wireless Club for a joint Field Day. Club members arrived early Saturday morning and worked to get four stations on the air, three for HF and one for VHF. The antennas were similar to years past, with wire antennas for 80 and 40, a triband beam for 20, 15, and 10, and a six meter dipole. After all the antennas were up, it was off to the races!

Band conditions were typical for this part of the solar cycle. 40 meters continues to be the band of choice for Field Day, producing QSOs almost every hour we were operating. 20 meters was also quite busy during the day, and most of the night. 80 was productive overnight and early in the morning. 15 meters proved troublesome on the beam; readjusting the antenna will be an upcoming project. Surprisingly, 10 meters was open on Sunday, netting us over



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50 QSOs in a short amount of time. 6 meters was only briefly open, but what an opening! For the last hour of the event, it seemed like there was no end to the callers as Nathaniel KB1QHX raked in the QSOs!

CW again was the mode of choice, as it has been for the last several years. There is a lot to be said for being able to make QSOs more easily with weaker signals, and having twice the point value is an added bonus! CW heavyweights Pi K1RV and Chuck W1HIS joined mainstay Joe N1QD as the primary CW ops this year. Digital modes also featured strongly this year, breaking into triple digits. Scott KO4W led the charge on RTTY and PSK31, and also acted as an HF ambassador to new member Ryan KC1GWY.

The club aggressively pursued bonus points this year, netting over 1000 points! Bonuses claimed included: Emergency Power, Media Publicity, Public Location, Public Information Table, Formal message to ARRL SM/SEC, W1AW Field Day Message, Formal messages handled, Natural power QSOs completed, Site Visit by invited elected official, Submitted via the Web, and Safety officer.

A summary and graphs courtesy of N1MM follow.

Field Day 2017 Boston Amateur Radio Club & Harvard Wireless Club QSOs by Band & Mode

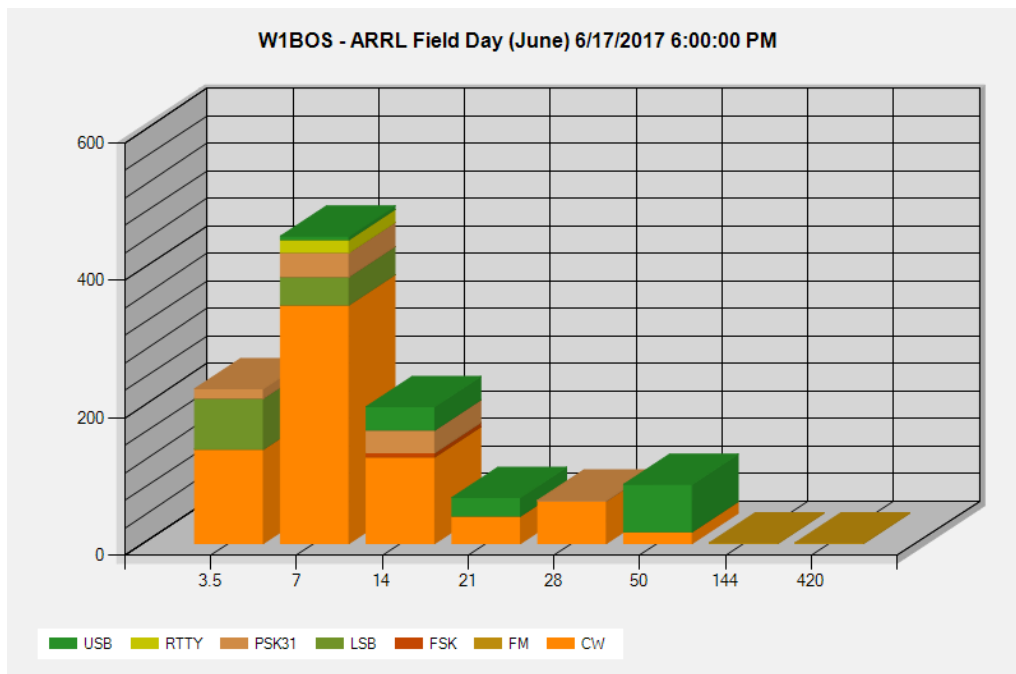
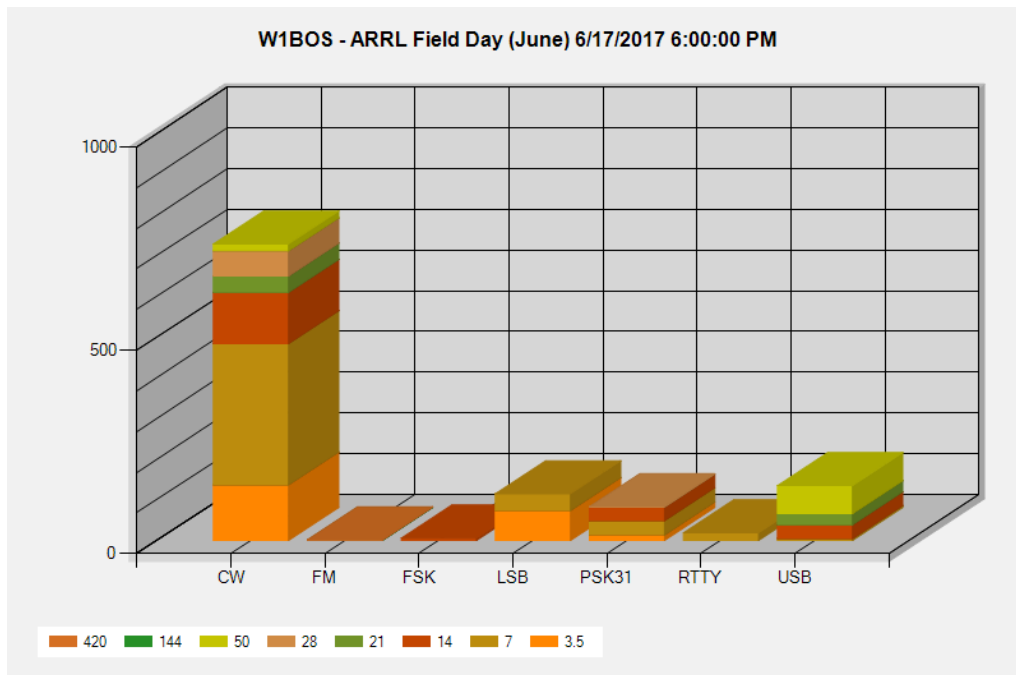
Band	CW	Digital	Phone	Total
80m	137	14	74	225
40m	347	54	46	447
20m	126	39	34	199
15m	40	0	27	67
10m	62	1	0	63
6m	17	0	69	86
2m	0	0	1	1
70cm	0	0	1	1
Total	729	108	252	1089

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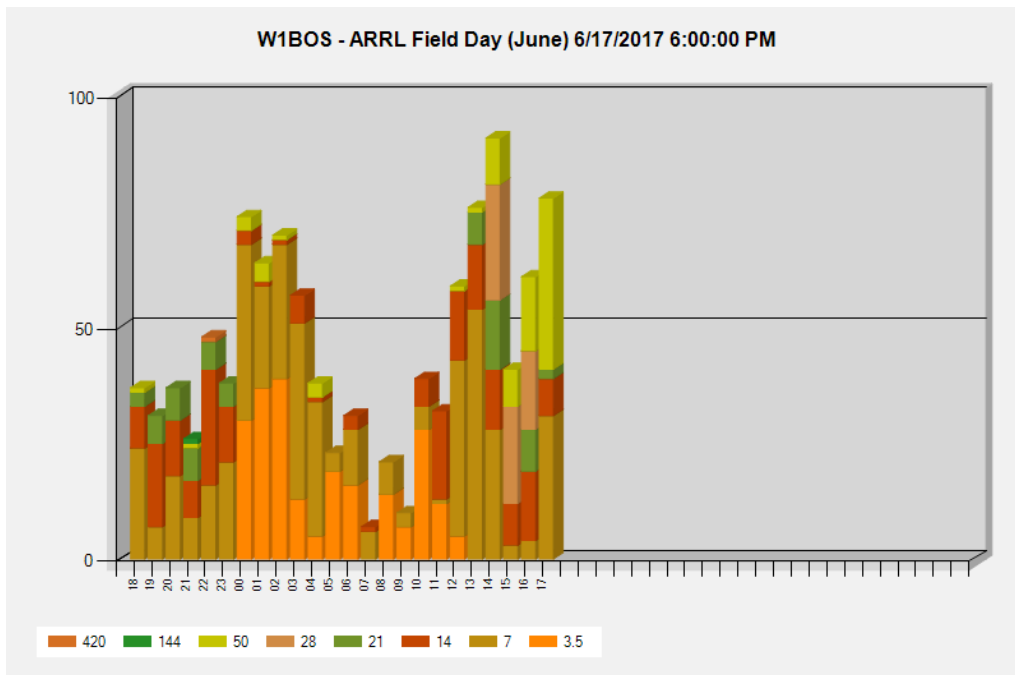


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BARC Meeting Calendar for 2017

Unless otherwise noted, all meetings will take place at the Brookline Police Headquarters.

General Meetings

September 21	2017	Thu	7:30 pm
October 19	2017	Thu	7:30 pm
November 16	2017	Thu	7:30 pm — <i>Radio programming, Gary Schwartz, N1ZCE</i>

Business Meetings

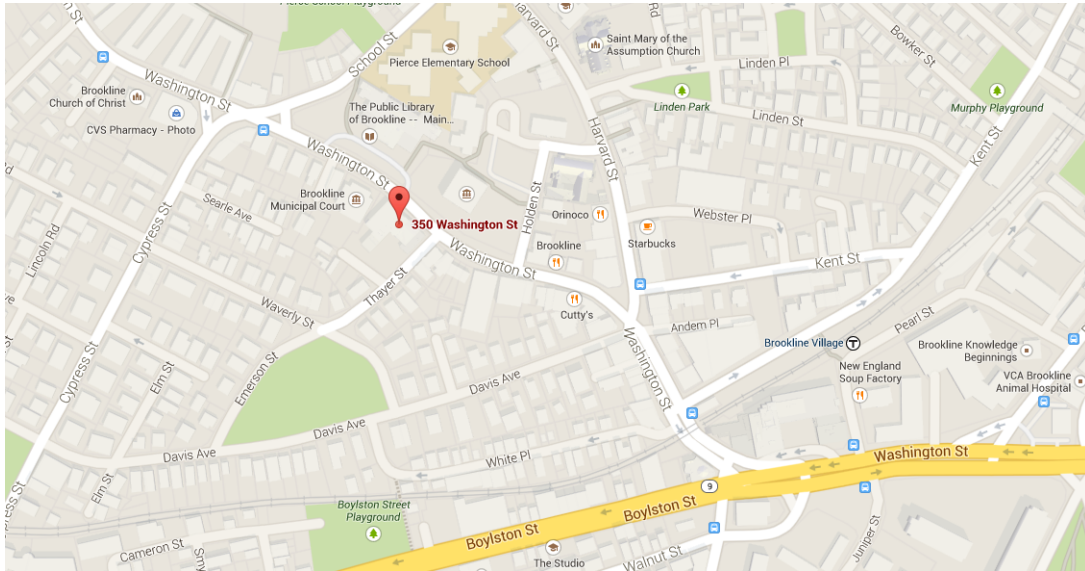
September 7	2017	Thu	7:30 pm
December 7	2017	Thu	7:30 pm

VE Sessions

October 9	2017	Mon	7:30 pm
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Area Map for Brookline Police Headquarters, 350 Washington St., Brookline



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.]

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

16–17 September	ARRL 10 GHz and Up contest, Round 2
16–17 September	New Hampshire QSO Party
17 September	Flea at MIT, Cambridge
17 September	North American Sprint, RTTY
21 September	BARC General Meeting, Brookline Police Headquarters, Brookline, 7:30 pm

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23–24 September	Maine QSO Party
24 September	Jimmy Fund Walk (Rp)
7 October	Deadline for articles for the October SPARC
8 October	BAA Half Marathon (Rp)
9 October	BARC VE Session, Brookline Police Headquarters, Brookline, 7:30 pm
15 October	Flea at MIT, Cambridge


▲ **Note change from usual date and/or location**
(Rp) = BARC Repeater likely to be used

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>.

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, how-tos, 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, Joe, NV1W, at nv1w@arrrl.net. Articles for the October issue must be received by October 7.



**The Clay Center Observatory
Welcomes BARC members**

www.claycenter.org

Public Astronomy Nights, Astronomy Day Events,
Amateur Radio Classes, Amateur Radio Youth Club,
Community and Adult Education, Weather Festival,
Science Lecture Series, Educational Outreach

20 Newton St., Brookline, near Larz Anderson Park



Quarterly Business Meetings – Bob Salow, WA1IDA

As the Bylaws require, BARC has Business meetings quarterly. Unless circumstances warrant, BARC Business meetings will be held on the first Thursdays of December, March, June, and September. The next such meeting will be on **December 7, 2017** at Brookline Police Headquarters in Brookline. All members are urged to attend and participate in club affairs. This is where club functions are discussed and decided, and your help is needed to guide us.

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A short opening period of each General meeting will continue to be used to bring any immediate business matters to everyone's attention.

To provide continuity of club business between meetings we also have a virtual business meeting via an email list. Any member interested in the affairs of the club can ask to be on this virtual meeting list—just give your name, call and your email address to President Joe Harris, N1QD.

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 col × 2 in. (business card)	\$15 per issue
1 col × 2 in. (business card)	\$75 per 6 consecutive months
1 col × 2 in. (business card)	\$125 per 12 consecutive months
1 col × 4 in. (½ column)	\$30 per issue
1 col × 9.5 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 Joe Chapman, NV1W, at 617.267.6349 or nv1w@arrl.net.

BARC Volunteer Exam Sessions

The Boston Amateur Radio Club schedule has been revised to suit the needs and interests of the applicants and examiners. **The next exam session will be on October 9, 2017.** Generally, sessions are held at Brookline Police Headquarters, 350 Washington St. in the Community Room (across from the information desk).

We give all exams (Technician, General, and Extra). *Testing is by reservation only.* Please bring the following with you:

- Your current license and a photocopy for the ARRL, if you are upgrading
- Any CSEs you are claiming, and a photocopy of them
- Valid picture ID or two valid non-picture IDs
- A pen and a calculator (if you want to)
- **\$15.00** (good for all the tests you take at that session, except for retests)

Note: Written tests can be taken sequentially at the same session for the same \$15 fee. The needed FCC forms will be provided.

To reserve a seat or for further information, contact: Jim Clogher, N1ICN, n1icn@arrl.net, or Linda Blair, NA1I, na1i@arrl.net.

Your Personal Ad Could Have Been Here

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 Joe Chapman, NV1W, nv1w@arrl.net.

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BARC Officers and Staff

President: Joe Harris, N1QD

781.844.8684; n1qd@n1qd.org

Vice President: Mark Duff, KB1EKN

781.749.7664; emgmt@comcast.net

Secretary: Joe Chapman, NV1W

617.267.6349; nv1w@arrrl.net

Treasurer: Jim Clogher, N1ICN,

781.901.3545; n1icn@arrrl.net

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781.749.7664; geriduff52@juno.com

Membership Services: Linda Blair, NA1I

617.500.4406; na1i@arrrl.net

Newsletter Editor: Joe Chapman, NV1W

617.267.6349; nv1w@arrrl.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, 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 Council of Eastern Massachusetts Amateur Radio Clubs (CEMARC) and 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
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
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)
Sat 9 am	Northeast SATERN Net	7.265
Sun 9:30 am	Yankee SSB Net	50.275
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)

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