



The SPARC

Amateur Radio - Communicating Worldwide for A
Century

Newsletter of the Boston Amateur Radio Club

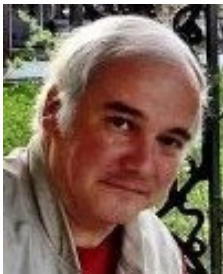
Serving Hams in the Greater Boston Area

July 2019 - VOLUME 31, NUMBER 7

www.barc.org - w1bos@arrl.net



Message from the Editor – Joe Chapman, NV1W



In the department of blowing my own horn, I finally managed to make a satellite contact at this year's Field Day after five years of trying. A big part of that was better technology: a true full-duplex transceiver (with a spectrum scope, which has become a near necessity for me) and a computer-controlled rotor. I'd also had practice making contacts on my roofdeck, and finally, FO-29 was kind enough to make a good high-elevation pass over Hingham at about 4 p.m. on Saturday.

We didn't quite make the impressive QSO totals of the past few years, not least because of the absence of twenty-four-hour operator Bill Collins, W1PL (SK). Still, the totals were respectable, and a good time was had by all. You'll see a writeup from Doc, KE1ML, in this issue of The SPARC.

In other space-related matters, I received the unhappy news that NASA did not accept the application from the foundation planning a contact with the International Space Station from Children's Hospital next year, on which several club members had been working. It had nothing to do with the technical plans; NASA wanted to see more of an educational emphasis.

As usual, the club is on a more relaxed schedule for the summer, but there will be a summer lunch in Harvard Square, being organized by the indefatigable team of Doc, KE1ML, and Morgan, KB1ZFP.

73 and good radio!

In this Issue of The SPARC

- Wire antenna ideas
- Field Day!
- Meetings and events
- BARC's first Summer Lunch



No BARC Meetings until September

The next BARC General Meeting will be held on Thursday, September 19th at 7:30 p.m. at Brookline Police Headquarters in Brookline Village. Directions can be found at <http://barc.org/directions-to-brookline-police-headquarters-brookline/>.

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449.175 (-) DMR CC1

The SPARC

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>.

Making Wire Antenna Elements for Portable Operation– Joe Chapman, NV1W

Between my urban shack at home and bicycle/backpack portable operations I've come to view antenna choice as a menu of compromises. The ideal antenna (good performance, low SWR, small and lightweight, and easy to erect and tear down) is something I expect to purchase someday at the Heaven branch of Ham Radio Outlet, should the Eternal Habitation exist and standards be relaxed enough to allow the likes of me admittance.

It's hard to argue with wire, and I have a few kits consisting of wire elements, a balun, a feed line, and either equipment for getting a wire into a tree or a fiberglass mast for use in places like Marconi Beach or a Bonsai farm where there aren't suitable trees.



Like many QRP/portable operators I swear by Invisible Toughcoat Silky 26 AWG wire from The Wireman (<https://www.thewireman.com>), which weighs less than a pound per 1000 feet and costs about \$25 for 100 feet. I think this is the same wire used in the PackTenna Mini and PAR EndFedz Trail Friendly 40/20/10.

The PackTenna has a gold 2mm socket near the BNC connector, and I've lately become sold on 2mm banana plugs and sockets for portable antennas. For example, if you have some 20 meter quarter-wavelength wires with a plug on one end and a socket on the other, you can chain two together to make a 40 meter $\frac{1}{4}\lambda$ wire. (I'm still working on strain relief ideas.) I also put a few sockets on a SOTabeams Pico balun rather than soldering the antenna wires on directly.

The plugs and sockets are used for remote-controlled model planes and are easy to find on-line; I bought 20 sets from Amazon for \$8.49. To solder them it's best to find a way to prop one up, either a piece of wood with a 2mm hole drilled in it or a pair of cross-lock tweezers. There's a cup on the end, which is what your wire goes into. Heat the plug and fill the cup about $\frac{3}{4}$ of the way with solder, then stick the tinned wire in, heat for a while, and hold it steady until it cools. Cover the body of the plug, the joint, and some of the wire with heatshrink tubing.

My KX2 has a small grounding socket that takes a (slightly larger) mini banana plug, so I made a 29' counterpoise from Invisible wire with a mini banana plug on one end and a 2mm banana plug on the other. Works like a champ!

Minutes of the June, 2019, General/Business Meeting – Geri Duff, KB1ISG

Members present: KB1EKN, KB1ISG, KB1TIC, KB1ZFP, KE1ML, KO4W, KZ2X, N1ICN, N1QD, NA1I, WA1IDA
Vice President Mark Duff opened the meeting at 7:32.

After a brief discussion on the lack of a president, the group was presented with the following members and the positions that they would like to hold. (Including a nomination for vice president from the floor.) The group then voted that the clerk (pro tem) Geri Duff cast one vote for the following:

- Vice President: Mark Duff, KB1EKN
- Treasurer: Jim Clogher, N1ICN

145.230 (-) CTCSS 88.5/100.0

Simplex: 147.420

449.175 (-) DMR CC1

The SPARC

- Secretary: Joe Chapman, NV1W

Moving on, Doc Kinne volunteered to organize a monthly breakfast. Dan Cross suggested a QST Cookout. Joe Harris, Doc Kinne and Morgan Johnstone will put together a social media plan to better inform members of upcoming events.

Bob Salow volunteered to get a speaker for the October 17th meeting.

It was announced that Jim Bradley has pulled together a team for the Brain Tumor Bike Ride.

The final discussion of the night was about the upcoming field day to be held at the Bare Cove Fire Museum in Hingham, ½ mile from the Greenbush Commuter Rail Station.

Member News – Joe Chapman, NV1W

Welcome back to Doc Kinne, KE1ML, and Morgan Johnstone, KB1ZFP, of Somerville.

Welcome also to Stu Solomon, W1SHS, of Franklin, and John Lee, KC1LHM, of Allston.



Field Day from a “Newbie’s” Perspective – Doc Kinne, KE1ML, ORS

Field Day is, perhaps, the iconic Amateur Radio activity (just after saving people’s lives in disasters). It is especially so for someone who had not done Field Day in over 20 years. It also served as the best (re)introduction to the club, ever!

The last time I did Field Day was as the station N2IKR back in Cazenovia, NY. This Field Day was filled with firsts — club firsts, friend firsts, personal firsts. And these are only the ones I know about!

145.230 (-) CTCSS 88.5/100.0

Simplex: 147.420

449.175 (-) DMR CC1

The SPARC



Heading the list was—finally—Joe Chapman’s Field Day Satellite contact! From what I can gather, this was a long running personal endeavour that had been tried several times before. This time, success was with him, garnering a contact for himself and the club, via the FO-29 SSB/CW satellite.

My friend, Morgan Johnstone, KB1ZFP, made his very first HF contact at Field Day. He’s currently a Technician-class operator. The station at our QTH is, right now, 2m only. We just don’t have the space, yet, for HF antennas. Field Day was the first time he’s been in front of an HF radio that was connected to a proper antenna. Not only was his first HF contact at Field Day, it was a DX contact with VE3YKA, Jason Kendall of Ontario!

For me there were many firsts. Nearly all of them were related to meeting people who I’d known for years via the radio, but had never met face to face. Two of the most memorable was being able to meet my ARRL Field Organization “bosses.”

My first and most important Amateur Radio mode is Traffic Handling. As such I’d know Marcia Forbes, KW1U, our Section Traffic Manager, since 2011 when I first put KE1ML on the air in MA. And, of course, when I put the station back on the air in April, she was one of my first contacts again. We’d never physically met. The newcomer for me was Greg Bennett, KC1CIC, our Asst. STM who over the last few weeks had been instrumental in me getting my station on Packet for the first time in decades.

Meeting the club members again was also great fun. We have more “Joes” in BARC than you can shake a stick at! Everybody was enthusiastic and really happy to be doing Field Day.

I also have to say that this Field Day was, by far, the best “catered” Field Day I’d ever been to. The antennas weren’t even all up, and the first contact had not been made, before Scott was taking lunch orders. Grilled dinner, garnered by Geri, and cooked by Scott, was also a treat. And to top it all off, amazingly in my estimation, there were strawberries and whipped cream when the antennas were all down and everything was picked up. Usually, after a big event like this people just want to head home, but here we were eating strawberries. That says a lot about the club, I think.

Every club’s Field Day is different, of course. Different clubs have different priorities. In that vein, it’s difficult to really compare last month’s Field Day to Field Days in my past, but the first thing that really struck me was the vast amount of computer power the BARC Field Day had. Twenty years ago in Central NY computers were a thing, too, but usually they only acted as terminals for the digital stations (which, back then, almost always meant packet, for which you could get a 100 point bonus). For us, Joe Harris had set up an actual local area network between several stations that handled our logging and generated statistics in real time.



145.230 (-) CTCSS 88.5/100.0

Simplex: 147.420

449.175 (-) DMR CC1

The SPARC

This year's Field Day was also the start of a new push to promote BARC via social media. As of this writing, our FaceBook page has been active again, and we successfully LiveStreamed small parts of the BARC Field Day to the world. This seemed to go quite well, bringing a multitude of people to the page over the weekend both to watch live and to watch later.

In the end the BARC Field Day nicely accomplished its mission—not points, but both bringing the club together and promoting it to the public. Nice job, everyone!

BARC Meeting Calendar for 2019

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

General Meetings (* Business/General Meetings)

September 19*	2019	Thu	7:30 pm
October 17	2019	Thu	7:30 pm
November 21*	2019	Thu	7:30 pm

VE Sessions

October 14	2019	Mon	7:30 pm
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New Business/General Meetings – Joe Chapman, NV1W

The Bylaws require that BARC hold four Business meetings per year. In an attempt to streamline our meeting schedule, BARC Business meetings will now be held concurrently with the General meetings in March, June, September, and November. We will attempt to keep the business portion of these combined Business/General meetings to a half hour. The next such combined meeting will be on **September 19, 2019** 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.

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 Secretary Joe Chapman, NV1W.

BARC's First Summer Lunch – Doc Kinne, KE1ML, ORS

Pining for those long lost days when we used to meet between meetings at the Old Country Buffet? Do you need to see the real faces of your BARC friends both old and new during the long days of summer?

If you answered “yes” to this—and who wouldn't?—come join the BARC club members for lunch (or breakfast. They'll do both!) at the IHOP in Harvard Sq. at Noon on 20 July!

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

145.230 (-) CTCSS 88.5/100.0

Simplex: 147.420

449.175 (-) DMR CC1

The SPARC

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

20 July	BARC Summer Lunch, IHOP, Harvard Sq., Cambridge, 12:00
20–21 July	North American QSO Party, RTTY
20–21 July	CQ Worldwide VHF Contest
21 July	Flea at MIT, Cambridge
3 August	Deadline for articles for the August SPARC
3–4 August	ARRL 222 MHz and Up Distance Contest
3–4 August	North American QSO Party, CW
17–18 August	North American QSO Party, SSB
17–18 August	ARRL 10 GHz and Up — Round 1
18 August	ARRL Rookie Roundup, RTTY
18 August	Flea at MIT, Cambridge
24–25 August	W/VE Islands QSO Party

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 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

145.230 (-) CTCSS 88.5/100.0

Simplex: 147.420

449.175 (-) DMR CC1

The SPARC

who are appropriate to our readers. For additional information, contact Joe Chapman, NV1W, at 617.267.6349 or nv1w@arrl.net.

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, 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@arrl.net. Articles for the August issue must be received by August 3.

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.

BARC Volunteer Exam Sessions

The Boston Amateur Radio Club offers license exams quarterly. **The next exam session will be on Monday, October 14, 2019.** Test 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.



NEW ENGLAND SCI-TECH

New England Sci-Tech Inc is a new 501(c)(3) STEM education center, amateur radio training center, and maker space located at 16 Tech Circle, Natick. It is home to New England Amateur Radio Inc (NE1AR) and the youth radio club Sci-Tech Amateur Radio Society (STARS). NE Sci-Tech welcomes memberships and donations via www.NESciTech.org or www.NE1AR.org.



145.230 (-) CTCSS 88.5/100.0

Simplex: 147.420

449.175 (-) DMR CC1

The SPARC

BARC Officers and Staff

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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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145.230 (-) CTCSS 88.5/100.0

Simplex: 147.420

449.175 (-) DMR CC1

The SPARC

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 Thu Sat 6 pm	MA RI Phone Net (NTS)	3.978
Tue 7:30 pm	Clay Center ARC 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)
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)

145.230 (-) CTCSS 88.5/100.0

Simplex: 147.420

449.175 (-) DMR CC1