



The SPARC

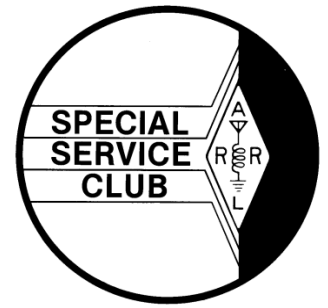
Amateur Radio - Communicating Worldwide for A Century

Newsletter of the Boston Amateur Radio Club

Serving Hams in the Greater Boston Area

August 2015 - VOLUME 27, NUMBER 8

www.barc.org - w1bos@arrl.net



Message from the President – Joe Harris, N1QD

Greetings, and I hope you are all having an excellent summer! There are two BARC news items I wanted to share with the members:

First, at the June business meeting there was a discussion about having a social gathering over the summer. To that end, I'd like to bring back the BARC Breakfast! Join us at the Old Country Buffet in Watertown (inside the Watertown Mall) on August 16 at 8 AM. This is the same day as the MIT flea market, so members interested in attending the flea will have enough time to socialize over breakfast, and then head over to Cambridge. The Watertown Mall is serviced by the 70 bus out of Central Square, and there is ample parking for those driving in. Come join us for breakfast!

Next, the ARRL New England Division Convention (Boxboro) is taking place the weekend of August 21–23. See <http://www.boxboro.org> for full details.

That's all for now, hope to see you all at the BARC Breakfast and at Boxboro!

73,

Joe Harris, N1QD

BARC Breakfast

Sunday, August 16, 2015 at 8:00am

Have Breakfast with BARC!

Sunday August 16 marks the return of the BARC Breakfast! We will be descending on the Old Country Buffet at the Watertown Mall at 8AM. The mall is located at 550 Arsenal St., Watertown. There is ample parking, and the mall is served by the 70 bus.

BARC General Meeting

Thursday, September 17, 2015 at 7:30pm

There are no general meetings during July and August. BARC's next general meeting will be held on Thursday, September 27, at 7:30 pm at Brookline Police Headquarters in Brookline Village. The speaker and program will be announced.

Repeaters: 145.230 (-) CTCSS 88.5

Simplex: 147.420

443.550 (+) CTCSS 110.9

Field Day Wrapup – Joe Harris, N1QD

BARC returned to the Bare Cove Fire Museum again this June for another successful Field Day! Turnout was up from last year, and we had several new(er) hams on the radio making some of the first HF QSOs. 6 meters also proved viable, as there were openings to the Midwest (we worked KS, IL, MO and WI). It was great having so much support from the club members, especially for set-up and take-down. Thanks to everyone that came out, to operate, to say hello, or just to catch up with old friends; it's great to see the club members come together and pull off a successful event like Field Day year after year. Thanks go to Mark KB1EKN and Geri KB1ISG for being our gracious hosts!



Here is our claimed score that was submitted to the ARRL:

	CW QSOs	Digital QSOs	Phone QSOs
160m	-	-	-
80m	39	-	-
40m	136	14	49
20m	104	-	9
15m	44	-	5
10m	-	-	-
6m	2	-	8
2m	-	-	-
TOTAL	325	14	71
Points / QSO	2	2	1
Total Points	650	28	71
Total QSO points	1498		

Bonus Points:

100% Emergency Power	300
Media Publicity	100
Set-up in Public Place	100
Formal message to ARRL SM/SEC	100
W1AW Field Day Message	100
Formal messages handled (10)	100
Submitted via the Web	50
Total Bonus Points	850
Total Claimed Score	2348



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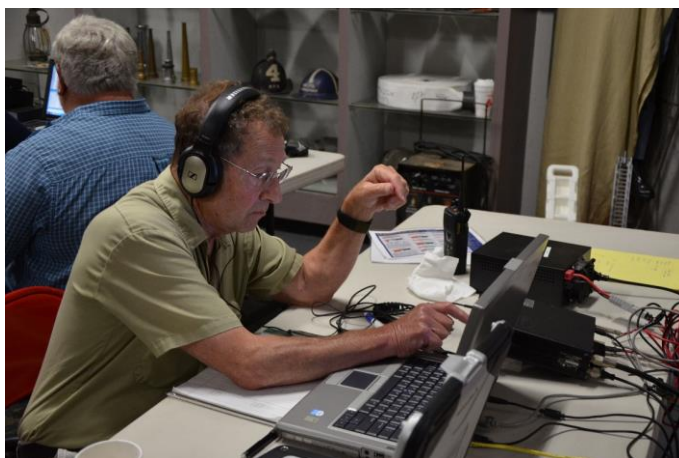
UHF Repeater Update

BARC's UHF repeater has been on the air for close to a year and a half now. In that time, it has not been particularly active. In an effort to boost traffic and interest, the club voted at the June business meeting to transition the repeater to digital, running DMR (also called MOTOTRBO). The club's repeater is DMR-capable, though it has been running in analog mode since it was put into service in early 2014. The transition is underway but not yet complete. Once the repeater has been reprogrammed to DMR, we will connect to the DMR-MARC network via the New England Digital Emergency

network, a group founded by Bill Barber, NE1B. Bill was the club's guest speaker at the May general meeting. Once the transition is complete, users will be able to have QSOs locally, within the region, or across the nation. More details will be available over the summer, and will be published in upcoming issues of the SPARC. Up-to-the-moment details will be posted to the yahoo group as soon as they are available, so see the post elsewhere in the SPARC for information on joining the group. Joe Harris, N1QD, the repeater trustee, can be reached via email at n1qd@n1qd.org to answer any immediate questions you may have.

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: <https://groups.yahoo.com/neo/groups/bostonARC/info>.



Review: NorCal Doublet/Elecraft BL2 Balun Combo – Joe Chapman, NV1W

My usual backpacking/bike trip antenna—the Par EndFedZ® EFT-10/20/40 Trail Friendly—is a fine piece of engineering, but I've been looking for a highly portable antenna that would cover more bands. I found a combination of the popular NorCal doublet and a balun to be portable, easy enough to tune, and quick to deploy and tear down. It would make a good HF antenna for an emergency go-kit as well as a travel antenna.

Instructions for building the antenna can be found at <http://www.norcalgrp.org/norcaldoublet.htm>. You start with 50 feet of 4-wire flat computer cable. Because I tend to be hard on things I take outdoors, I used some fairly good stuff with 24 AWG wire. You also need a #0 fishing snap swivel, a few cable ties, and some lightweight cord. It couldn't be easier: peel down the outer two conductors to a length of 22 feet. Then trim the inner two conductors and loop them around the snap

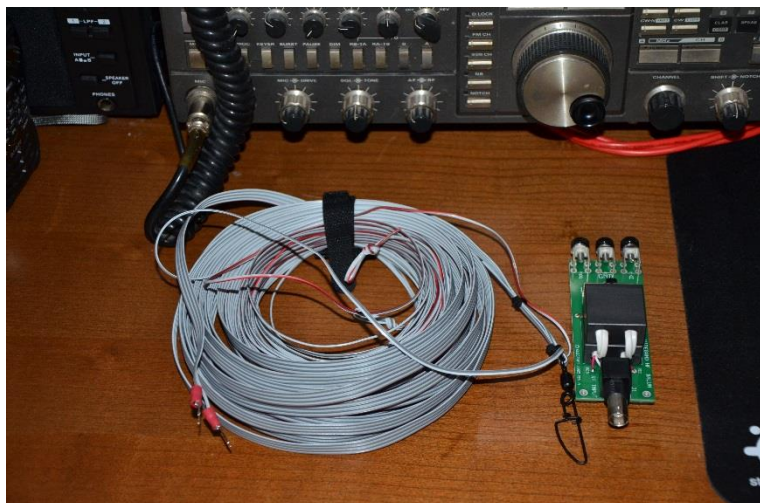
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swivel, securing it with the cable ties. At the other end of the feed line, peel off the outer two conductors and strip them (I added some spade terminal lugs). It took twenty minutes at most.



To pack it for travel, I coiled up the radiators and fastened them with strips of Velcro, then coiled up the feedline and secured that with a Velcro strap also. Total weight is 6.5 oz. To deploy it, I fastened the center snap to a 20 foot crappie pole and attached lengths of bank line to the ends of the radiators and stretched them out in an inverted V. You could also use slick line thrown over a tree branch instead of the fishing pole.

It seemed clear that I'd need a balun. I liked the specs on the Elecraft BL2 Wideband 1:1 & 1:4 Switchable Balun, and it's one of their one-night "Mini-Module" Kits that I've always had good luck with. As usual with Elecraft the instructions were excellent, and it went together in about a half an hour (the only moderately annoying thing is trying to get the last turn through the core). No delicate soldering here: everything is big! Total weight is 5 oz.

Hooking everything up couldn't be easier: there are screw terminals for the doublet's feedline and a BNC for connecting to the transceiver.

I tested it by the extremely scientific method of listening to how much racket the tuner in my KX3 made trying to match it. Ten through 30 meters tuned fairly rapidly, with the exception of 17 meters. Both 17 and 40 meters rattled around more, but the tuner eventually found a match. I also tried rotating the radiators, and as you'd expect the antenna is fairly directional.

I haven't run anything more than five watts through this antenna, though *Reference Data for Engineers: Radio, Electronics, Computer and Communications* says that in 20°C free air, 28 AWG solid wire can handle 1.4 amps (= 100W into a 50Ω load). The 24 AWG stranded wire in my version of the doublet can of course handle more. The balun will handle 250W, so this combo seems useful for non-QRP folks as well.

Like spaghetti sauce for a crowd, the doublet can be doubled (a quadruplet?). There are several accounts on the web of people using the same basic design with 44 foot radiators to handle 80 meters as well.

BL2 Wideband 1:1 & 1:4 (Switchable) 250W Balun. Kit, \$39.95. Elecraft, P.O. Box 29, Aptos, CA 95001. 831-763-4211. <http://www.elecraft.com>.

Boxboro 2015 – Joe Harris, N1QD

Next month marks the return of the ARRL New England Convention, better known as Boxboro! The convention runs August 21–23 at the Holiday Inn in Boxborough, MA. The hotel is located at 242 Adams Place, near the intersections of Routes 111 and 495. This is the first convention in three years, as the 2014 convention was substituted with the ARRL Centennial show in Hartford. Boxboro has been home to informative panels, a great flea market, commercial vendors, and the W1A special event station. Highlights this year include keynotes from Jeff Jolie NM1Y at the Friday night DXCC dinner and Gordon West WB6NOA at the Saturday evening banquet. Tickets are available at <http://www.boxboro.org>.

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BARC Meeting Calendar for 2015

Unless otherwise noted, all meetings will take place at the Brookline Police Headquarters; the map is later in this newsletter.

Breakfasts

August 16 Sun 8:00 am

General Meetings

September 17 Thu 7:30 pm

October 15 Thu 7:30 pm

November 19 Thu 7:30 pm

VE Sessions

July 13 Mon 7:30 pm

October 12 Mon 7:30 pm

Business Meetings

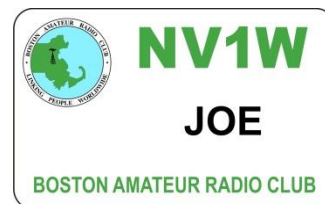
September 3 Thu 7:30 pm

December 3 Thu 7:30 pm

BARC Badges! -- Joe Chapman, NV1W

Rick, NV5A, the Sign Man of Baton Rouge, is now offering BARC badges. They're full-color plastic badges with our logo and your call sign and first name, at a basic price of \$11.50 for a badge with a safety pin fastener. Rick was a great help in designing a badge for us, and he does good work and ships promptly.

See our listing on the Sign Man's web site: <http://www.thesignman.com/clubs/boston.html> for details and fastener options.




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-in's 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.



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



Hands-Only™
CPR

1



Call 911

2



Push hard and fast in
the center of the chest.
Learn more at handsonlycpr.org

American Heart
Association
Learn and Live



I See the Future

16 Aug	BARC Breakfast
16 Aug	MIT Flea (Cambridge)
21–23 Aug	ARRL New England Convention (Boxboro)
3 Sep	BARC Business Meeting
17 Sep	BARC General Meeting
20 Sep	MIT Flea (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.

Tired of QRP Equipment Reviews? – Joe Chapman, NV1W

We are always looking for articles for the newsletter. I have reserved this space for your articles, reviews, tips, how-tos, or other ham related information. You can even write about your new legal-limit amplifier! Send your submissions to the Editor, Joe, NV1W, at nv1w@arrl.net.

Articles for the September issue must be received by September 5.

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; or Bob Salow, WA1IDA, at wa1ida@arrl.net or 508.650.9440.

Quarterly Business Meetings – *Bob Salow, WA1IDA*

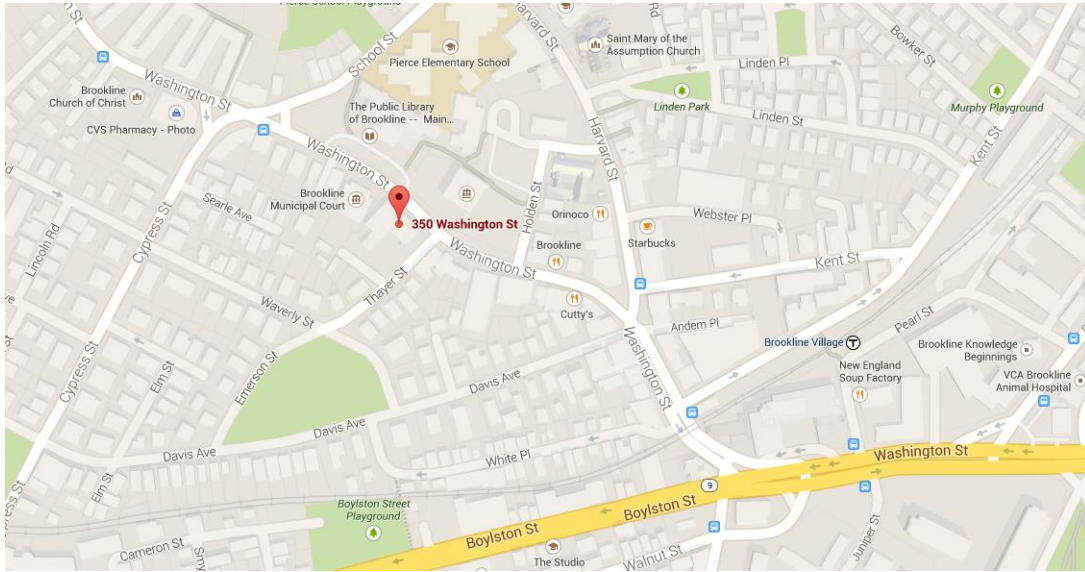
As the Bylaws require, BARC has Business meetings quarterly. Unless circumstances warrant, BARC Business meetings will be held on the first Thursdays of December, March, June, and September. The next such meeting will be on **3 September 2015** at the Brookline Police headquarters. All members are urged to attend and participate in club affairs. This is where club functions are discussed and decided, and your help is needed to guide us.

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.



Area Map for the Brookline Police Headquarters, 350 Washington Street, Brookline MA



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 2015 exam session schedule is shown elsewhere in this newsletter issue.** Generally, sessions are held at Brookline Police Headquarters, 350 Washington St in the Community Room (across from the information desk). A map is shown above.

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 ID (picture ID preferred)
- 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@arri.net, or Linda Blair, NA1I, na1i@arri.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 the Editor, Joe Chapman, at nv1w@arrl.net.

BARC Officers and Staff

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617.908.5019; n1icn@arrl.net

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Linda Blair, NA1I, na1i@arrl.net

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Newsletter Editor: Joe Chapman, NV1W

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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 Special Service 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)
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 9 pm	BARC Club Net	145.230 (PL 88.5)
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)
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
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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