



The SPARC

Amateur Radio - Communicating Worldwide for A Century
Newsletter of the Boston Amateur Radio Club
Serving Hams in the Greater Boston Area

August 2013- VOLUME 25, NUMBER 8
www.barc.org - w1bos@arrrl.net



Message from the President – Joe Chapman, NV1W

I recently joined the Straight Key Century Club, a group of CW-loving hams who use manual keys. Searching for a way to be properly eccentric in an association where the eccentricity level is already high, I acquired a sideswiper, serial number 009, made by David, NK1V. He makes a fine key in the Vibroplex style on a big plate of black enameled metal and it's a joy to use.

Sideswipers, also called "cootie keys", were one of the early attempts at avoiding telegrapher's carpal tunnel syndrome, or "glass arm". They're notable for being the first successful manual key that operated horizontally and thus are the ancestor of bugs and iambic paddles.

The key makes contact when pushed to either the right or the left, so you operate it by wagging it back and forth, doing the dot/dash timing yourself. When using a sideswiper I find that at some point my brain clicks back into the state where dots are one direction and dashes are the other and things get a little hair-raising. I've been known to mess up my own call. Fortunately the SKCC are a tolerant bunch.

The original sideswiper, J. H. Bunnell & Co.'s double speed key, is commonly said to have been patented in 1888. Other authorities claim that the extant keys don't look like anything made that early, and point to the fact that the double speed key doesn't appear to have been advertised until 1904. Bunnell also sold a sideswiper specifically for radio work, with heavy contacts for the early spark radios. Bunnell sideswipers were sold into the 1920's.

The few commercial cootie keys made in the 21st century are no longer available: Llaves Telegraficas Atresenas's production ended when Guillermo's, EA6YG, key went silent in 2008. GHD in Japan also no longer makes its GF-601, perhaps a relief for those who might have been tempted to take out the second mortgage for a GHD key. So the options are to build one, wait for NK1V to put serial number 010 up on eBay, or get a left-right single lever key and jumper the two contacts together.

My next President's Message will appear as we're starting to gear up again for the 2013-2014 season. I hope to be able to announce a good lineup of speakers for the fall's general meetings. Stay cool and enjoy the rest of the summer, and if you hear "SRI OM LWRNINU HH LEARNING NEW KEY" in a strange fist a little below 14.050 MHz, say hello.!

Save the Date!

BARC's annual end-of-summer cookout will be held on Georges Island in Boston Harbor on Saturday, September 21 starting at about noon. Rain date is Saturday, September 28. Ferry service to the island is available from Boston and Quincy and the ferries are accessible. More details on ferry access and schedules will be forthcoming in the September issue of *The SPARC*. The Harbor Islands website is <www.bostonharborislands.org>

RSVP to Joe Chapman, <nv1w@arrrl.net> or 617-267-6349. We're planning on setting up an HF station and possibly doing an IOTA activation; there will be food and good company. Spouses and significant others are welcome.

BARC Meeting Calendar for 2013

Unless otherwise noted, all meetings will take place at the Brookline Police Headquarters; the map is later in this newsletter. These dates will be published again in the newsletter as needed.

General Meetings

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

VE Sessions

September 9 Mon 7:00 pm
November 16 Sat 10:00 am

Business Meetings

September 5 Thu 7:30 pm
December 5 Thu 7:30 pm

BAA Half Marathon Is Running -- Bob Salow, WA1IDA

When the name Boston Athletic Association (BAA) is attached to an event, the world of runners jumps to attention. Runner registration for the Half Marathon was opened in mid-July. In a few hours over 7000 entrants had registered.

BARC is proud to be asked to coordinate ham communications for this event, as we have for its past twelve years. Now in the thirteenth year, this international classic is expected to be better than ever. Ham radio has established its community value at times like these. We are asked to support safety and administrative communications. With a little fine-tuning, including many ideas from hams, the event is expected to be even better than last year.

The race starts and finishes in Boston's beautiful Franklin Park. The course, on the "Emerald Necklace," is 98% in Boston and 2% in Brookline, and is qualified to international standards. We need you again, as the Race Director has asked for even more ham assignments (that's what happens when we are appreciated).

If you are new to ham public service (or don't have much familiarity with it), this is the way to become familiar without much pressure. For hams, this is an easy introduction and an appreciated community service.

Date: Sunday, 13 October 2013

Ham start: 0600 or 0700 (because of road closures)

Ham finish: about 1100

Yes, I know it is the day before Columbus Day. The upside is it starts early and ends early, leaving plenty of time to enjoy the long weekend. Your help is greatly needed to continue this as a superb event and to uphold our reputation for dependable support. Our assignments consist of monitoring hazardous and critical locations along the course, and the medical/support stations. As we did in the past, we plan to use a 2-meter repeater and possibly a 70-cm repeater. A hand-held with a good battery and an antenna better than a "rubber duck" is the way to go.

If you can help, please contact the BARC Public Service Coordinator, Brett Smith, AB1RL, as soon as possible. Contact Brett at <ab1rl@arrl.net> or at 859.466.5915 for further information. The assignments, parking instructions and more detail will be provided as soon as they are available. Net Control will be at White Stadium.

The BAA requests you park in the secure facility near White Stadium, be transported to the stadium, then be brought to and from your assignment.

The SPARC

Site Testing for WRTC 2014 – Joe Harris, N1QD

Every year, the IARU HF Championship takes place during the second weekend of July. Every four years, the World Radio Team Championship (WRTC) is held during this contest. This is the Olympics of contesting, where top competitors assemble from around the world to try to best each other when the only variable is the operator. In 2014, New England will have the opportunity to host WRTC, when there will be close to 60 sites on the air from locations around Massachusetts and southern New Hampshire.

A concerted effort has been made to equalize all station locations, with identical antennas at each site. But wait? How do they determine that all the locations are really equal? Well, they have to take measurements. Lots of measurements. With tools such as the Reverse Beacon Network <<http://www.reversebeacon.net>>, it is possible to see the S/N ratio of a station as heard at various sites all over the world. In 2012 the WRTC organizers put about a dozen of the planned sites on the air during the IARU contest to see how well they played. In 2013, there were close to 25 stations on the air. This is where my part of this story comes in to play.



Team K1KP's handiwork at Dighton Rock state park

Once we had the tower sections bolted together and on the ground, the Yagi was attached to the top, and dipoles strung off a cross bar. The WRTC folks had devised a falling derrick system to raise the tower safely with no climbing involved. Still, it wound up being necessary to rotate the antenna 90 degrees while the tower was at a 30 degree angle off of the ground so we could clear the tree. Once we were past the tree, we got the tower vertical and installed the dipoles in inverted-V fashion. Uh-oh, the 80 meter antenna wanted to attach to ground in the middle of the site's access road. We had to string it up through the tree and then over the street.

Once our part was complete, the operating team took over the site for the next day and a half. The beam team made a quick stop to check out the second site we would be responsible for in 2014, and then departed for home, exhausted.

I am a member of the multi-op team at K1KP in Andover, MA. Tony, K1KP has a great Multi-2 setup, and it's a pleasure to get on the air with him and make some points for the YCCC. Over the winter, he put out a note requesting assistance with a WRTC beam team. These are the volunteer groups that will set up and take down the competitors' stations.

I agreed to help out, and we received our assignment about a month before the station test. We would be setting up one, possibly two stations in southeastern Massachusetts.

Early Friday morning, the day before the contest, we assembled in Milford, where Krassy, K1LZ had provided storage space for some of the WRTC sites. We loaded up a truck with forty feet of Rohn 25, a seven element triband Yagi, 40 and 80 meter dipoles, coax, and other necessities. From there, it was a forty minute drive to the Dighton Rock state park in Berkley.

Once onsite, we broke into smaller teams. Art, NF1A and Rick, K1PAD worked on assembling the tribander while Tony, Jeff, N1RD, Larry, W1DYJ, and I set about preparing the tower. Immediately, we saw that there were going to be some issues here. The clearing was not quite as large as was spelled out in the Beam Team documentation, and to boot there was a large tree near where the tower had to go. This was going to require some finesse.

The SPARC



KB1REQ makes QSOs at the Mansfield Airport

Not content to just set up one of the sites, I visited another test location on Saturday at the Mansfield Airport. Here, Jeremy, KB1REQ was getting ready to run for 24 hours using the Clay Center's W1CLA call sign. Jeremy is a current member of the radio club at Northeastern University, so I was eager to give a fellow Husky a hand. I had volunteered to help make some CW contacts during the morning. The night before, I had fashioned an ugly serial-port-to-CW-jack keying cable so we could use N1MM Logger to send CW and protect the airwaves from my less than stellar fist. We were also visited by Dave, K1MBO, the NU club advisor and a good friend. We took turns manning the radio, making sure to tune in to prescribed bands and beam heading at certain times so that the organizers could collect their data.

Sunday morning the Beam Team regrouped at the site to take down the station. As expected, takedown was much quicker than the setup. We were back at the warehouse by lunchtime, putting the equipment back in storage until the main event, WRTC 2014.

Looking Ahead At Public Service -- Bob Salow, WA1IDA

When hams engage in public service as mandated by the FCC Rules, the benefits go well beyond just following the rules. We can enjoy our hobby – and have fun! We protect the health and safety of event participants. We support worthy charities. We learn to work within an organized effort. We experience the technical aspects of operating under adverse conditions. We can practice for communicating under emergency conditions. We can demonstrate these qualities to the communities we serve and thus promote our service for their acceptance.

Throughout the year BARC coordinates hams for numerous public service events. Most of these are also suitable for hams who are new to helping at such events as well as experienced operators. For 2013, we have already been tasked with several events. Remaining on our schedule is:

➤ **BAA Half Marathon – 13 October 2013 – (Boston)**

Other events may jump in on short notice. Among our skills is the ability to apply our technical, organizational and staffing quickly and proficiently. Join our team and join in the fun and learning. We can use your help. Contact Brett Smith, AB1RL, at 859.466.5915 or <ab1rl@arri.net>.

The SPARC

Taking a Dose of My Own Medicine – Dan Romanchik, KB6NU

After I wrote a blog post on preventive maintenance, I decided to take a dose of my own medicine and do a little preventive maintenance around my own shack. I started with the Astron RS-35M, DC power supply. I had been noticing a few little things, such as the voltage adjustment being a little fussy, that I wanted to correct before the supply failed on me.

After removing the cover, I vacuumed all the dust out of the supply. The RS-35M wasn't very dirty, but even so, getting the dirt out of a piece of equipment is probably the first thing you'll want to do when performing preventive maintenance. Dirt impedes air flow. That can lead to higher operating temperatures, and as the lab manager that I interviewed for my blog post said, "Heat kills."

Not only should you vacuum any dust out of a cabinet, you should also clean the fan filters, if your gear has them. Dusty filters prevent air from flowing smoothly through the equipment, and that means the fans don't cool as well as they should.

Once that was done, I did a visual inspection. One thing that you want to look for are components that look like they're getting too hot. Another thing to look for is evidence of arcing. Whatever is causing the overheating or arcing will eventually cause a unit to fail. Fortunately, I found neither.

Next, I checked to see that the components mounted to the enclosure were securely screwed down. In the RS-35M, the transformer, the bridge rectifier, and an electrolytic are mounted to the enclosure. Oddly enough, the bridge rectifier was quite loose, so I tightened it down. Also loose were the output terminals. I tightened these down as well.

Finally, I squirted a little cleaner and lube into the voltage adjustment pot and worked it back and forth. That seemed to do the job. That pot now works smoothly and cleanly.

I put the cover back on, reconnected the power cable, and got back to making QSOs. It should be good for another couple of years.

QRP Package for Sale –Eric Falkof, K1NUN

Transceiver \$525

Yaesu FT-817ND five watt, all-mode QRP transceiver (160m through 70 cm, less 1.75m of course) with the power conditioner (to prevent overload/shorts/polarization) on the input and a Collins 500 Hz CW filter, original mike, and neat stick-on flip feet. Battery operation or external power supply. Excellent condition, nonsmoking environment.

I have the original AA battery case, shoulder strap, ducky antenna (for 6, 2, and 440; all three pieces), original manual, copy of service manual, charger/PS (3rd party), original box. Additionally, many web reprints of reviews, modifications, information. Excellent condition, since only used outside my home about 4 times, and really not used much at all, otherwise. Original NiMH batteries still hold a charge nicely.

Antenna Tuner \$100

Elecraft T1: <www.elecraft.com/T1/T1.htm>. Can tune antenna, as well as indicate output power, SWR, and more. Shirt-pocket size. "The T1 can be used with any 0.5-W to 20-W transceiver covering bands in the 160-6 m range. This includes kits, home-built rigs, and commercial transceivers such as the FT-817, IC703, Ten-Tec Argonaut, SG2020, etc." I have used this tuner with rigs running as low as 250 mw. Special FT817 band-following cable available from Elecraft. Always used only indoors.

CW Paddle \$25

Arizona SQR Pion miniature iambic paddle <www.w5jh.net/brasspaddle.htm> (the original version, serial number 190). Only 2 inches square, polished brass. Weighs 3 ounces.

Package Price: \$600

Contact Eric, <K1NUN@netscape.net>, or leave message at 508-659-6146.

The SPARC



The banner features a teal background. On the left is the American Heart Association logo with the text "Learn and Live". In the center, there are two circular icons: the first shows a red mobile phone with a "1" in a red circle above it, and the second shows red hands being pushed together with a "2" in a red circle above it. To the right of the icons, the text reads "Call 911" and "Push hard and fast in the center of the chest. Learn more at handsonlycpr.org".

I See the Future

Note: There are no BARC General meetings in July or August.

18 Aug	MIT Flea (Cambridge)
25 Aug	NoBARC Flea (N. Adams)
5 Sep	BARC Business Meeting
9 Sep	BARC VE Session
15 Sep	MIT Flea (Cambridge)
19 Sep	BARC General Meeting
11-12 Oct	NEARFest (Deerfield NH)
13 Oct	BAA Half Marathon (Boston) <i>(Rp)</i>
17 Oct	BARC General Meeting
20 Oct	MIT Flea (Cambridge)

(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.

Got a Story? Why Not Share It? -- Joe Harris, N1QD

We are always looking for articles for the newsletter. I have reserved this space for your articles, tips, how-to's, or other ham related information. Send your submissions to the Editor, Joe, N1QD, at <n1qd@n1qd.org>.

Articles for the August issue must be received by August 4.

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 x 2 in. (business card)	\$15 per issue
1 col x 2 in. (business card)	\$75 per 6 consecutive months
1 col x 2 in. (business card)	\$125 per 12 consecutive months
1 col x 4 in. (1/2 column)	\$30 per issue
1 col x 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 Harris, N1QD, at 781.844.8684 or <n1qd@n1qd.org>; or Bob Salow at <wa1ida@arrl.net> or 508.650.9440.

Repeater: 145.230 (-) CTCSS 88.5

Simplex: 147.420

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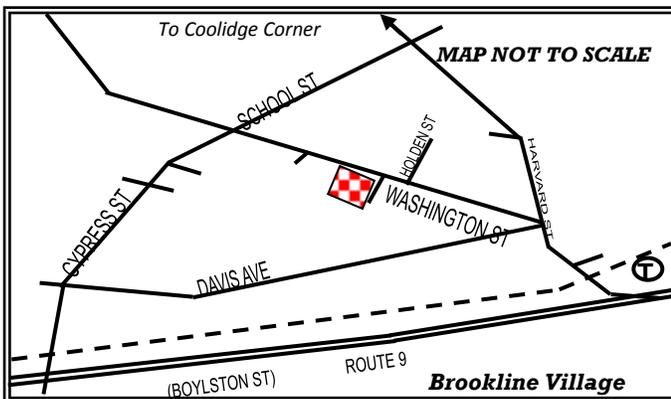
Quarterly Business Meetings -- Bob Salow, WA1DA

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 **5 September 2013** 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 Chapman, NV1W.

Directions to the Brookline Police Headquarters, 350 Washington Street, Brookline MA





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

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 2013 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@arrl.net> or Linda Blair,
NA1I, <na1i@arrl.net>.

WORLDWIDE DISTRIBUTION



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Repeater: 145.230 (-) CTCSS 88.5

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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 Harris, at <n1qd@n1qd.org>.

BARC Officers and Staff

President: Joe Chapman, NV1W
617.267.6349; nv1w@arrl.net

Vice President: Linda Blair, NA1I;
617.500.4406; na1i@arrl.net

Secretary: Joe Harris, N1QD
781.844.8684; n1qd@n1qd.org

Treasurer: Jim Clogher, N1ICN,
617.908.5019; n1icn@arrl.net

Volunteer Exams:
Jim Clogher, N1ICN, n1icn@arrl.net
Hank Buccigross K1QK, k1qk@arrl.net

Public Service Coordinator: Brett Smith, AB1RL
859.466.5915; ab1rl@arrl.net

Public Information Officer:
Geri Duff, KB1ISG
781.749.7664; geriduff52@verizon.net

Membership Services: Linda Blair, NA1I
617.500.4406; na1i@arrl.net

Newsletter Editor: Joe Harris, N1QD
781.844.8684; n1qd@n1qd.org

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 5:30 pm	Eastern Mass/Rhode Island Phone Net (NTS)	3.915
Daily 7 and 10 pm	Eastern Mass/Rhode Island CW Net (NTS)	3.658
Daily 8 pm	Eastern Mass 2M Traffic Net (NTS)	145.230 (PL 88.5)
Daily 8 pm	Slow Speed CW Net	28.160
Daily 10:00 pm	Heavy Hitters Traffic Net (NTS)	MMRA-linked repeaters: 146.610, 146.670, 146.715, 146.820, and all 222 and 440 repeaters
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	HHTN Swap Net	146.640
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)