



The SPARC

Amateur Radio - Communicating Worldwide for A Century

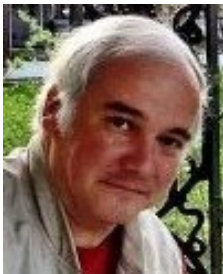
**Newsletter of the Boston Amateur Radio Club
Serving Hams in the Greater Boston Area**

December 2019 - VOLUME 31, NUMBER 12

www.barc.org - w1bos@arrl.net



Message from the Editor – Joe Chapman, NV1W



December is a quiet month for the club and for ham radio in general, to judge from the number of entries in the “I See the Future” column in this newsletter. (And speaking of quiet, one of the contests is the ARRL 10 meter.) The club had a good time up at the Blue Hill Observatory on SKYWARN Recognition Day, which featured a dramatic (and smoky) demonstration of the hazards of excessive SWR. Fortunately we toasted a 15 meter filter and not something more expensive. The bands could have been better, though we had good luck on 2 meter simplex.

Things will pick up in January, with the ARRL's Straight Key Night on the 1st and BARC's holiday party the afternoon of Sunday the 5th. SKN is an excellent chance to drag out your straight key for a relaxed night of low-key operating, and the party a relaxed afternoon of eating and drinking. As always, the holiday party cost will be \$25 per person excluding bar items, with the club picking up the remainder of the tab. Spouses, significant others, and friends are welcome to join us.

On a personal note, I had the first of two eye surgeries a few weeks ago, and it was a complete success. Thank you for your patience with my attempts to get out The SPARC while not being able to see it very well, and for your support.

73 and good radio!

In this Issue of The SPARC

- WA1GXC on civility
- Meetings and Events
- Holiday party and Ham of the Year
- CTCSS on the Boston repeater
- Pictures from SKYWARN Recognition Day



BARC Holiday Party, Sunday, January 5, 1:00 p.m.

The annual BARC Holiday Party will be held on Sunday, January 5 at 1:00 p.m. at the Stockyard restaurant in Brighton. For more details, see the article in this issue of *The SPARC*.

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

Simplex: 147.420

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>.

Sermon on the Antenna Mount – Harris Pitnof, WA1GXC

I regret I've not submitted anything for the BARC newsletter in many months. Rather than writing for *The SPARC*, I've been spending endless hours at the computer screen, correcting errors I've found on the Internet. Seriously. For those of you who operate on HF ("the Short Waves" for you real old-timers) you're no-doubt familiar with a site on the World-Wide InterTube which, for legal reasons, we'll just refer to as QRX.com.

You can pull-up propagation data, see other hams' stations and biographies, and look for references on technical subjects. Lots of fun. There's a feature called "Forums"... Uh-oh. It's kinda like Facebook and Twitter, except rather than random adults you'd excuse yourself from at parties, it's random adults you need to flee from who are all hams.

I made the big mistake of responding to several posts which were infuriatingly mean and incorrect, and in the process got sucked-in to a world which begged to be straightened out. Have you ever been wrong about something scientific, technical, moral, or political? I know I haven't. You can call my ex-wife and I'm certain she'll back me up.

There's an incredible amount of bad behavior and bad manners out in the world. We, as hams, are able in a small way to make things a little better; indeed, Federal Regulations (47 CFR 97.1(e)) codify that the justification for the Amateur Radio Service includes, in part, "...Extension of the Amateur's unique ability to enhance international goodwill."

There are 613 Commandments in the Hebrew Bible; the Prophet Mohammed said: "Kindliness is the root of wisdom." Jesus gave the Sermon on the Mount for guidance.

Be kind to beginners. You and I, some time long ago, didn't know it all. If you hear someone on the bands who's a jerk, spin the the biggest knob on the front panel of your rig. And if the eternal "QSY YOU LID" fills the air, either via CW or SSB—Why not?

In the words of TV's Dr. Phil, one of the great minds of our time, "You wouldn't worry so much what people thought of you if realized how seldom they did." In this season of new beginnings, let's all try to be better both on-and-off the air. And oh—if you do call my ex-wife, feel free to call collect.

BARC Meeting Calendar for 2020

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

General Meetings (* Business/General Meetings)

March 19*	2020	Thu	7:30 pm	[location to be determined]
April 16	2020	Thu	7:30 pm	[location to be determined]
May 21	2020	Thu	7:30 pm	
June 18*	2020	Thu	7:30 pm	— Elections
September 17*	2020	Thu	7:30 pm	
October 15	2020	Thu	7:30 pm	
November 19	2020	Thu	7:30 pm	

145.230 (-) CTCSS 88.5/100.0

Simplex: 147.420

449.175 (-) DMR CC1

The SPARC

VE Sessions

January 13	2020	Mon	7:30 pm
April 13	2020	Mon	7:30 pm
July 13	2020	Mon	7:30 pm
October 12	2020	Mon	7:30 pm

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 **March 19, 2020** 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.

CTCSS Tones on the BARC Repeaters – Joe Chapman, NV1W

I've received some questions lately from people who are confused by some of the repeater information we publish in *The SPARC* and on the website.

Everyone should either know or have forgotten what a CTCSS tone (also called by its old name "PL") is since it's on the Technician exam. This is a subaudible tone that's added to a voice signal that causes a receiver to open its squelch. If a repeater has a CTCSS specified, its receiver requires that tone to access the repeater. If the tone isn't enabled or it's wrong you will be ignored. You may also see this called the "input CTCSS", since it applies to the repeater's input (that is, your transmit frequency).

Most repeaters will also add a CTCSS tone to their transmitted signal. If you set your rig up to use "tone squelch" your receiver will ignore transmissions on your receive frequency that don't have the tone. This mode is entirely optional; if you don't use it your radio will just open its squelch when it receives a carrier.

On the Boston VHF repeater we use a different tone on the repeater's output, 100.0 Hz. (The input CTCSS has always been 88.5 Hz). This somewhat unusual arrangement is done to mitigate some interference problems at the repeater site. If your transceiver doesn't allow you to set split tones (most amateur rigs don't) you should use tone mode, not tone squelch mode, and set the CTCSS to 88.5.

The Boston UHF machine uses a digital protocol called DMR. CC1 is the "color code", which performs the same function as a CTCSS in the analog FM world. You have to have a special radio that supports DMR to use this repeater.

BARC Holiday Party and Ham of the Year – Joe Chapman, NV1W

This year's Holiday Party will be held on Sunday, January 5, at 1:00 pm at the Stockyard restaurant in Brighton. Directions can be found at <http://barc.org/directions-to-the-stockyard-brighton/>.

Cost will be \$25 per person; you will be responsible for your own bar bill. Unlike some past years, we will be ordering off the menu, so you don't have to make a meal selection in advance. Please RSVP by Saturday, December 28, using the form attached to this issue of *The SPARC* or by sending mail to Joe, NV1W, at nv1w@arrl.net.

145.230 (-) CTCSS 88.5/100.0

Simplex: 147.420

449.175 (-) DMR CC1

The SPARC

It is also time to select the 2019 Ham of the Year. You may also use the party RSVP form for this or send mail with your nomination and rationale to Joe, NV1W.

Member News – Joe Chapman, NV1W

We welcome Bob Sparkes, KC1KVY, of Billerica. People may have heard Bob on the Boston repeater during the NTS and BARC club nets. We also welcome John Moock, KM4RCI, of Allston. Club member Scott Gaudet, formerly KO4W, is now a very CW-friendly K1SU.

We have several members who are not yet licensed, who should note that the club is happy to help people study for, take, and pass the Technician exam. Contact Joe Chapman, NV1W, at nv1w@arrl.net if you're interested.

BARC Net Peamble

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

14–15 December	ARRL 10 Meter Contest
22 December	ARRL Rookie Roundup, CW
1 January	ARRL Straight Key Night
4 January	Deadline for articles for the January SPARC
5 January	BARC Holiday Party, The Stockyard, 1:00 pm
5 January	ARRL Kids Day
5–6 January	ARRL RTTY Roundup
13 January	BARC VE Session, Brookline Police Headquarters, Brookline, 7:30 pm
18 January	Winterfest, Whitman, MA
19–21 January	ARRL January VHF Contest
25–26 January	Winter Field Day
31 January	End of the discount for 2020 membership renewals

145.230 (-) CTCSS 88.5/100.0

Simplex: 147.420

449.175 (-) DMR CC1

The SPARC

▲ Note change from usual date and/or location

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 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 January issue must be received by January 4.

Thanks to George Kehler, W4BQK, for photos in this month's issue.

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 January 13, 2020.** 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

The SPARC

- Any CSCEs 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 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.



SKYWARN Recognition Day: The Observatory



Harry, WA1GXC, defangs a fan.



Scott, K1SU, on twenty meters as Mark, KB1EKN, looks on

145.230 (-) CTCSS 88.5/100.0

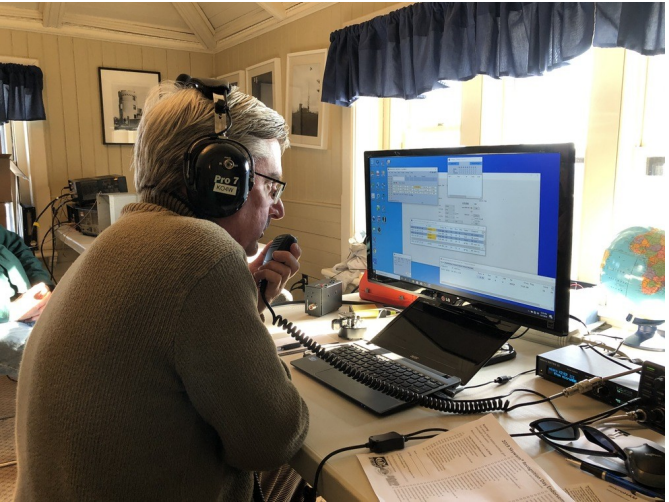
Simplex: 147.420

449.175 (-) DMR CC1

The SPARC



Bob, W1IDA, Joe, NV1W, and Steven Provost at SKYWARN Recognition Day



George, W4BQK, on twenty meters



Harry, WA1GXC, and Joe, N1QD performing a filter autopsy



View of the 20 and 40 meter dipoles and the faithful antenna supporting tree

Photos by George, W4BQK

**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

145.230 (-) CTCSS 88.5/100.0

Simplex: 147.420

449.175 (-) DMR CC1

The SPARC

BARC Officers and Staff

President: *(position vacant)*

Vice President: Mark Duff, KB1EKN
781.749.7664; emgmgt@comcast.net

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

Treasurer: Jim Clogher, N1ICN,
781.901.3545; n1icn@arrl.net

Volunteer Exams:

Jim Clogher, N1ICN, n1icn@arrl.net

Linda Blair, NA1I, na1i@arrl.net

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

Public Information Officer: Geri Duff, KB1ISG
781.749.7664; geriduff52@juno.com

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

Newsletter Editor: Joe Chapman, NV1W
617.267.6349; nv1w@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, 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.

The SPARC is published monthly by the Boston Amateur Radio Club. The design and content are Copyright 2019, all rights reserved. Permission is hereby granted to reprint or distribute by electronic or other means any material herein, provided this publication and the issue date are credited. Such permission is limited to use for non-commercial purposes for the benefit of the Amateur Radio community. Permission for other purposes must be obtained in writing.

The SPARC

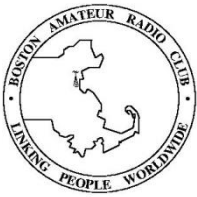
Greater Boston Net Directory

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 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)
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



Boston Amateur Radio Club



MEMBERSHIP INFORMATION

2020

Members: if there are **no changes** to the below information from last year, check here and fill in only your name and call sign.



___ New ___ Renewal

Full name _____ Call sign _____
Name used on the air _____ Evening phone (____) _____
Address _____ Daytime phone (____) _____
_____ Cell phone (____) _____
City/Town _____ State _____ ZIP (9 digits) _____
E-mail address _____

LICENSE CLASS

___ Novice
___ Technician
___ General
___ Advanced
___ Extra
___ Former ham
___ Not yet a ham

ARRL MEMBERSHIP

___ Life
___ Annual
___ Not a member

EMCOMM?

1 2 3

Have you taken ICS-700?

YES NO

The BARC membership list is for club use **only**, including publishing the roster to our members **only**. Do you wish to **restrict** such limited distribution:



OMIT ADDRESS



OMIT EVENING PHONE

IMPORTANT:

To save the club significant costs and effort, the club now publishes its newsletter **only** online. You will be notified monthly by email to link to a web page where the earliest posting will be available.

Our newsletter, *The SPARC*, is the source of local and general ham radio news and official club information.

It is therefore essential that for this fast and cost saving plan, that you indicate above **your best email address**.

Membership Category

Full year 2020 if paid between
1 Nov 19 to 31 July 20

Half year 2020 if paid between
1 Aug 20 to 31 Oct 20

REGULAR MEMBER: Not otherwise qualified below

JUNIOR MEMBER: Are you under age 18?

SENIOR MEMBER: Are you over age 64?

FAMILY MEMBER: [Regular member I live with _____]

I am the family member to receive club mailings YES NO

Note: Each member in the family **must** complete a separate form.

\$25.00

\$12.50

\$12.50

\$ 6.50

\$12.50

\$ 6.50

\$12.50

\$ 6.50

If you are able, please help support the club's activities and repeaters: ■ ■ ■ ■ ► \$

Total \$

Signature _____ Date _____

©BARC

- Welcome to the **Boston Amateur Radio Club**! Join in the fun of being a ham!
- Your cancelled check is your receipt; membership acknowledgement is for the year shown on the newsletter address label.
- Make checks payable to: **BOSTON AMATEUR RADIO CLUB**
- Please write your call sign on your check.

Give to any officer or mail to:

BOSTON AMATEUR RADIO CLUB
PO Box 15585
Boston MA 02215-0011

Dues \$ _____ Addl \$ _____ Recd by _____ Date _____

DB by _____ Memb Nr _____ Date _____ Loc _____

Gratuitus
est per



*It's that time
of the year !*

Boston Amateur Radio Club

Holiday Party

Here's why you must not pass this up:

1. Past experience has shown that you are guaranteed to have a good time.
2. You will be among the members and friends of the *Boston Amateur Radio Club*.
3. The BARC gourmet and gluttony departments have praised it far and wide.
4. Good food at a reasonable price.
5. You get to vote on the BARC "Ham of the Year" and watch the winner squirm.
6. It's for you, your family and your friends (if any).

Here's what's happening:

Where:

The Stockyard
135 Market St.
Brighton MA 02135

When:

Sunday, 5 January 2020
1:00 pm
(*The January club meeting is suspended.*)

Parking in the restaurant lot

Street parking on Guest St & Life St

Ⓣ buses: #86 and #84 stop nearby

Talk in on 145.230, PL 88.5

Food ?? Of course !!

We will be ordering off the regular menu so there's no need to choose now. You will be responsible for your own drinks.

© BARC

Cost ?? We knew you'd ask !!

It's a bargain at \$25.00 per person (tax and gratuity included). Reserve seats for yourself, your family, and your friends by sending your check, payable to *BARC*, with the coupon below, and get it in the mail quickly.

Nominate your choice for the *2019 BARC Ham of the Year* on the *other* coupon below.

Send *both* coupons below to:

Boston Amateur Radio Club Send before 28 December 2019

P.O. Box 15585

Send before 28 December 2019

Boston MA 02215

Send before 28 December 2019

A party? Of course we'll be there! **Body Count:** _____

2019 BARC Ham of the Year

We will be ordering off the regular menu; no need to choose now.

I nominate: _____

◀ Cash Bar - You will be responsible for your own bar bills ▶

Because: _____

Name _____ Call Sign _____

Email _____ Phone _____