



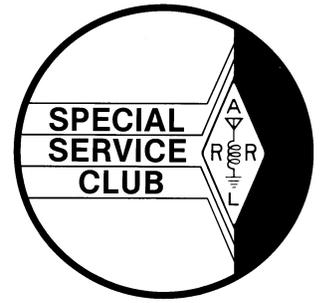
The SPARC

Newsletter of the Boston Amateur Radio Club

Volume XXI, Number 2; February 2009

<http://www.barc.org>

w1bos@arrrl.net



Emails Asking for Personal Information Are Not from ARRL

ARRL HQ has received several reports from members with arrrl.net email reflectors who have recently been contacted via email asking for personal information, such as user names and passwords. Please be assured that these emails are fraudulent attempts at “phishing” and did not originate from ARRL.

According to ARRL Information Technology Manager Don Durand, “This is a very crude attempt at phishing, using an easily determined spoof of the originating/return address. There is never a time when we would ask via mass email for user names and passwords of arrrl.net users. There is simply no need to ever do so.”

If you receive an email asking for personal information and it looks like it originated from ARRL, please do not respond, just delete it.

Field Day? It's Only Four Months Away

No, no, it is not too early to start planning for Field Day 2009. Start by thinking about how our 2008 Field Day went. The club opted for a limited contribution, but open to all. We provided compact HF stations, antennas and generators. Beyond that, anyone could participate in the club activity by providing their own station facilities – and they did.

The result was a resounding success. We set up, operated, and tore down with ease – and had *fun* doing it. Larz Anderson Park in Brookline is the place; **27-28 June** is the weekend.

The fun is yours for the taking. We will be discussing it at regular meetings and at special planning meetings to be announced. Bring your ideas, or just say you want to be there – to see, to learn, to try, or maybe to see how other people have fun.

CORRECTION: Videos on Installing PL-259

In the January issue of *The SPARC* an incorrect URL was shown for the RG8X link. The correct URL is indicated below.

The most common connector for mating the radio to the antenna cable is the PL-259 type. Short videos are available showing how to install a PL-259 on coax cable.

- ❖ For RG-8X coax, go to www.youtube.com/watch?v=PzXXjzmA-IE.
- ❖ For RG-213 coax, go to www.youtube.com/watch?v=n1nabA6yMoI.

New Ham, Old Ham? HF Can Be For You

You can be a new ham or an old ham, but chances are you have not experienced HF. Despite the history of the high frequencies, most hams now hold a Technician Class or even a General Class license, and stick with VHF/UHF and repeaters. Wait until you get a taste of the “short waves.”

At the January General meeting Tom, KB1OKP, took new hams through the protocol for VHF/UHF communication on local repeaters and nets. The program for the February General meeting will introduce you to HF communications protocol. The meeting will be held on **Thursday, 19 February**.

There are literally hundreds of HF nets. They vary from informal “rag chewing” nets to more formal “directed” nets. Come and learn more about it at our February meeting. With the code requirement a thing of the past, new hams should be looking to upgrade to General Class and get more privileges on HF. Perhaps this program will whet your appetite for the great bands beyond.

Our General meetings start at 7:00 pm on the third Thursday of each month at the Salvation Army third floor auditorium. The address is 147 Berkeley St, but the entrance is on Columbus Ave. The nearest **T** stations are Back Bay on the Orange line or Commuter Rail (exit the rear of the station), and Arlington on the Green line. Free parking is available in the adjacent lot. The entrance to the parking lot is from Columbus Ave. (across the street from the firehouse). A map appears on page 7 of this newsletter.

We usually take the first 30 to 45 minutes for any pending business, followed by the main topic of the month. Both portions of the meeting are important.

If you have any ideas about topics that you would like to see presented at future meetings, please feel free to contact one of your officers. Remember – this is *your* club and we are here to help *you* have fun and get the most out of ham radio.

Future BARC Meeting Dates

(Third Thursdays at 7:00 pm)

- 19 February 2009 – General Meeting
- 5 March 2009 – Business Meeting
- 19 March 2009 – General Meeting
- 16 April 2009 – General Meeting
- 21 May 2009 – General Meeting

Seen it all, done it all, can't remember any of it.

Repeaters: 145.23 (-) PL 88.5 447.175 (-) PL 110.9

Simplex: 147.42

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 - 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 practice 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 numerous public service events. Most of these are open to hams who are new to helping at such events as well as experienced hams. For 2009, we have already been tasked with several events, and more are expected. Feel free to contact Bob Salow, WA1IDA, if you have any questions - walida@arrl.net or 508.650.9440.

- *Multiple Sclerosis Journey of Hope* – 4 April 2009 – (Newton)
- *Multiple Sclerosis Boston Walk* – 5 April 2009 – (Boston and Cambridge)
- *Run of the Charles Canoe Race* – 26 April 2009 – (Charles River: Needham to Boston)
- *Bikes Not Bombs* – 7 June 2009 – Boston and southern suburbs

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.

ARRL Expands Member Access to QST Archive

-- The ARRL Letter, January 30, 2009

ARRL is pleased to announce that online access to the *QST* archive, www.arrl.org/members-only/qqnsearch.html will be expanded. Beginning February 1, 2009, ARRL members will be able to search and view *QST* - from December 1915 through December 2005. With an additional year - 2005 - added to the viewable archive, this valuable benefit is available to all ARRL members. As an added benefit, ARRL Diamond Club members at the Brass level and above - as well as ARRL Maxim Society members - will be able to get images from the entire *QST* archive, right up through December 2008, an additional three years.

The online archive was first introduced to members in fall 2008, providing PDF copies of articles from the huge *QST* archive, from December 1915 through December 2004. Since then, thousands of members have enjoyed searching, viewing and printing their favorite articles, projects and more. The membership benefit is a service of the ARRL Technical Information Service (TIS).

Access to the archive is free for ARRL members. *QST* is the official journal of ARRL, the national association for Amateur Radio.

Change is inevitable, except from a vending machine.

FEMA Revises the National Incident Management System (NIMS)

NIMS is the national standard for incident management. NIMS establishes standardized incident management processes, protocols, and procedures that all federal, state, tribal and local responders will use to coordinate and conduct response actions.

According to DHS, it has clarified “existing NIMS concepts, better incorporating preparedness and planning and improving the overall readability of the document. The revised document also differentiates between the purposes of NIMS and the National Response Framework (NRF) by identifying how NIMS provides the action template for the management of incidents, while the NRF provides the policy structure and mechanisms for national-level policy for incident management.”

The popular introductory course, IS-700, is being revised and updated, and new materials must be used when available. If you have previously started the IS-700 course and need to take the final exam, you must complete the exam and obtain a passing score before 13 February 2009. After that date the IS 700 exam will no longer be available. At this time there are no downloadable materials for the revised IS 700, but they are forthcoming.

It is highly recommended that hams who intend to participate in emergency or other public service activities take (and pass) the online IC-700 course which is a basic introduction to NIMS, but is not designed to replace the Incident Command System and position-specific training.

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More specifically, FEMA has issued a new online course, ICS-802, *Emergency Support Functions – Communications*. This course presents a variety of communications options, not limited to any specific group responding to a disaster. It enables hams to be better aligned with the emergency management structure. It can be found at:

<http://training.fema.gov/EMIWeb/IS/IS802.asp>

Field Day Packets Now Available

-- ARRL Letter, January 30, 2009

Get ready for ARRL Field Day, June 27-28, 2009. Packets are available on the ARRL Field Day Web site

www.arrl.org/fieldday Packets include the complete rules (including changes for 2009). Other reference items that will be available include forms, Section abbreviations, a kit to publicize your event with the local press and more.

Badges – Get 'em While They're Hot

New club badges have been made for all licensed members. Thanks to the leadership of Tom, KB1OKP, and the support of Mike, N1IST, and Bob, WA1IDA, a new design has been produced on a laminated badge. Get yours by coming to any BARC meeting; the badges and clips will be ready.

Hams Needed – Two Multiple Sclerosis Walks

-- Rick Savage, KB1LYJ

The Multiple Sclerosis Society has again organized two local events this year, but no longer on the same day. The “Boston MS Walk” will be on Sunday, 4 April, organized as it has been for the past several years. The “MS Journey of Hope,” will start and finish in Newton on Saturday, 5 April.

We have been asked to support communications for both. The “Boston MS Walk” will start and finish at the Harvard athletic facility on North Harvard St near Soldiers Field Rd in Brighton. The route of the walk will be on both sides of the river in Cambridge and Boston.

The “MS Journey of Hope” starts and finishes at Newton South High School with a 7.5 mile course. There will be several checkpoints, vehicles and medical coverage for us to support.

Each will be managed by a Net Control station, using both VHF and UHF repeaters. Your help is vital for these worthy causes. If you can lend a hand, contact Rick, KB1LYJ, at rpsavage@comcast.net or 781.289.7364.

Digital Technology for Emergency Communications Course

The ARRL has just released a CD-ROM to introduce all the ways Amateur Radio operators are using digital technology as a valuable emergency communications tool.

It answers questions such as:

- Can you transfer supply lists or personnel assignments between emergency operations sites?
- Can you get critical emails to the Internet if a connection goes down?
- Can you relay digital images of damage at specific locations?
- Can you track the locations of emergency personnel and display them on computer maps?
- ...and more!

The topics discussed during the course include:

- Packet radio APRS
- Winlink 2000
- IRLP
- EchoLink and WIRES-II
- D-STAR
- APCO-25
- HF sound card modes
- Automatic Link Establishment (ALE)

This course is a great starting point for anyone interested in the public service applications of digital communications technology.

Pay For Your Membership On-Line

BARC accepts PayPal. If you want to fill out your membership on-line, go to www.barc.org/membership.html or click the membership link on our home page. Our PayPal address is w1bos@arrl.net.

It's Membership Renewal Time

Repeaters: 145.23 (-) PL 88.5 447.175 (-) PL 110.9

-- Bob Salow, WA1IDA

The BARC fiscal year is the calendar year, so our membership renewal process begins again. If you have not yet renewed for 2009, the Membership Information form for 2009 is included with this issue of the newsletter. We need your support to help you get the most out of ham radio. Our club is one of the strongest and best around; your help is needed to keep it growing.

Please help the Treasurer by renewing promptly. Also, please consider receiving the newsletter electronically to save BARC significant money on postage. You can complete the form online (at our website) and use PayPal or your mailed check. Or you can fill out the enclosed hard copy and mail it with your check to the address shown, or bring it to the club meeting. Of course, we would love to see you at our meeting(s).

Winter vs. Meetings

Winter will be here regardless of how many dances you do. This raises the possibility of meeting cancellations due to fierce winter conditions.

Our early warning system: Official announcements will be made – at least by 1700 before scheduled meetings – on the Boston repeater (145.230 MHz) and by a message on barc-list. Someone will be designated to monitor the repeater for inquiries. Please stay safe by checking before starting out to a meeting in threatening weather.

Quarterly Business Meetings

-- Bob Salow, WA1IDA

We have Business meetings quarterly rather than monthly as in the past. 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 March 2009**. 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 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 any officer.

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Simplex: 147.42



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

Why, Why, Why?

-- Bob Salow, WA1IDA

Most BARC meetings draw about one tenth of the total membership. Why? The officers, the Executive Committee and the program coordinators wrestle with this question. What can we do to increase your interest in the meetings? It's your club and we want to know what can be done to have you join in. We also want to know what might stand in the way of your attendance.

Send me an email at walida@arrl.net and let's try to make BARC an even better club.

PowerPole Connectors and Tool Available

Anderson® PowerPole® connectors are the standard for ARES and most other ham uses. They allow reliable, interchangeable power connections. BARC has the special tool to make the crimped connections. We have a supply of the connector bodies and contacts to enable each member to have two full sets free. Additional connector pairs are \$1/pair.

Tools and connectors can be available at any meeting for installation, instruction, and assistance. Contact Bob, WA1IDA, before the meeting and the kit will be brought.

Got a Question? We May Have an Answer

A new (occasional) entry in this newsletter will be a Q&A for you. We will rely on you to ask the questions and we believe another reader will come to your aid with an answer.

When you pose a question, include a means for a direct answer. If you wish to remain anonymous, any answer will appear on these pages. Anyone with a valid answer is asked to provide the Editor with a copy of the answer, including the question code. Send your questions and/or answers to the Editor, N1TMF, at n1tmf@pvctrionics.com.

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 Editor Paul Carter, N1TMF.

Have Breakfast With BARC

Repeaters: 145.23 (-) PL 88.5 447.175 (-) PL 110.9

NOTE: Beginning January 2009, the breakfast date has been changed to the *third* Sunday of each month.

BARC holds a social breakfast on the **third** Sunday of each month at the Old Country Buffet in the Watertown Mall. Breakfast is served from 0800 to 1130 (although we rarely stay beyond 1000).

We just get together, socialize and eat, without any formal club events or business. Family and friends are welcome. The extensive buffet breakfast is *very* good. The cost is reasonable (seniors get a discount).

The Old Country Buffet is in the Watertown Mall, 550 Arsenal St. in Watertown. There is plenty of parking. From Memorial Dr, continue on Greenough Blvd to the Watertown exit, turn right on Arsenal St. The #70 T bus from Central Square Cambridge to Watertown Square to Waltham stops right at the Watertown Mall. We hope to see all of you there – and bring your appetite!

W1AW to QSY on 160 Meters

-- ARRL Bulletin 12, February 10, 2009

Starting Monday, March 9, the Maxim Memorial Station, W1AW, will be using a new 160-meter frequency for its CW transmissions. To accommodate increasing activity near the current bulletin frequency of 1817.5 kHz, W1AW will move to 1802.5 kHz to reduce the possibility of interference.

BARC Growth

It's a rare month when we fail to add a few new members. Periodically we publish their names so that you can give them a special welcome. There may also be some upgrades and long lost members who rejoin, so greet them, too.

Peter Grace AI6PG Upgrade, new call
Bob Walthall (no call)

Please welcome the new BARC members and congratulate the new upgrades. Make it a point to introduce yourself when you see them at a meeting. In addition, we would like to note here all call sign changes. If you fit any of these categories, please promptly notify the Keeper of the Database, Bob Salow, WA1IDA at: 508.650.9440 or email: walida@arrl.net.

Join ARRL and BARC Gets A Benefit

The ARRL club commission program allows ARRL Affiliated Clubs to retain a portion of the ARRL dues from each new member or renewal that the club submits.

Under the ARRL Club Commission Membership Recruitment Program, clubs retain \$15 for each *new* membership and \$2 for each renewal submitted (regular and senior memberships only). Just make your ARRL membership check to BARC and the Treasurer will take it from there.

Details and forms can be found on the web at the ARRL Club Companion page:

www.arrl.org/FandES/field/club/benefits.html#commission.

Simplex: 147.42

BARC Volunteer Exam Sessions

The Boston Amateur Radio Club holds monthly VE sessions on the second Monday of each month. Sessions are held at 7:00 pm at the Pierce School, 50 School St in Brookline, Room 110, next to the cafeteria. A map is shown on page 7.

If the Brookline Public Schools (or the Pierce School itself) is closed due to inclement weather or other problems, the exam session for that month will be canceled.

There is a free parking garage at the circular driveway. If driving, enter School St from the Washington St side (opposite 394 Washington), rather than from Harvard St. Check: www.barc.org/barc/school_map.gif : for more info.

For those traveling via the T, take the "D" branch of the Green Line to the Brookline Village station. Walk north along Harvard St 0.2 miles to School St, then turn left. The Pierce School is on the left. The #66 bus runs on Harvard St, crossing School St.

Talk in on 145.230 MHz (-), PL 88.5 Hz.

We give all exams (Technician, General, and Extra). You don't need to pre-register. Please bring the following with you:

- Your current license *and a photocopy for the ARRL*, if you are upgrading
- Any CSCEs 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)
- Written tests can be taken sequentially at the same session for the same \$14 fee.

NOTE: Beginning in January 2009, the exam fee has been raised to \$15.00.

The needed FCC forms will be provided.

For further information, contact:

Jim Clogher, N1ICN, 617.364.4658 nlicn@arrl.net
Tom Bertolino, KB1OKP, 781.395.5538 kb1okp@arrl.net

Future Exam Dates

(Second Mondays at 7:00 pm)

9 March 2009
13 April 2009
11 May 2009
8 June 2009

(Exams are omitted in July and August)

Officers Needed

President (vacant)
Secretary (vacant)

The "acting" officers in these positions are exhausted. We need you to step forward to help lead the best club in this area. Nominations are still open!

I See the Future

14 Feb	AARC Flea (Marlboro)
15 Feb	BARC Breakfast
19 Feb	BARC Monthly General Meeting
5 Mar	BARC Quarterly Business Meeting
7 Mar	MTARA Flea (Feeding Hills)
9 Mar	BARC VE Exams
14 Mar	CAARA Flea (Rockport)
19 Mar	BARC Monthly General Meeting
29 Mar	FARA Flea (Framingham)
29 Mar	CVRC Flea (Henniker NH)
4 Apr	MS Journey of Hope (Rp)
5 Apr	MS Boston Walk (Rp)
13 Apr	BARC VE Exams
16 Apr	BARC Monthly General Meeting
18 Apr	NE Antique RC (Manchester NH)
19 Apr	MIT Flea (Cambridge)
26 Apr	Run of the Charles (Rp)
1-2 May	NEAR Fest (Deerfield NH)

(Rp) = BARC repeater(s) may 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 New England and some of New York, the "Ham - Electronic Flea Market" and the "PSLIST" lists tell the story. They are posted by e-mail to barc-list and on PBBSs regularly. If needed, contact any club member who has access to these.

Orange Caps for Emergency and Public Service Events

BARC has a supply of the bright orange caps for use at emergency or public service events. They are adjustable to fit all but the very largest heads, and proclaim, "Emergency Communications."

The price is \$5.00, and they are available at club meetings, or contact Jim, N1ICN, or Bob, WA1IDA.

Business Can Advertise Here

The SPARC accepts commercial advertisements. We encourage promotion of products and services which would be of interest to our members. Members are urged to seek prospective advertisers who are appropriate to our readers. **Note that these rates are effective 1 January 2009.**

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

For layout requirements contact Paul Carter at n1tmf@pvcronics.com or 617.232.6982; or Bob Salow at wa1ida@arrl.net or 508.650.9440.

Repeaters: 145.23 (-) PL 88.5 447.175 (-) PL 110.9

Simplex: 147.42

No VHF SWR Meter? Minor Problem

-- Dan Romanchik, KB6NU

I subscribe to a lot of Amateur Radio mailing lists. One of the most interesting is the HamRadioHelpGroup mailing list
<http://groups.yahoo.com/group/HamRadioHelpGroup>.

Recently, a ham asked: Will a CB SWR meter work on a 2-meter ham radio? Mark, K5LXP, replied: "Yes and no. I use a CB SWR meter to check 2M antennas all the time. There is a trick to it however. If all you want to do is check SWR on your 2M antenna, you don't necessarily have to buy a dedicated VHF/UHF SWR meter. What I keep in my tool bag for that is a \$5 hamfest special CB SWR meter. They really don't work well on 2M but there's a trick that will net a reasonably accurate SWR reading on 2M.

"What you do is connect up the meter as usual, key the rig with the switch in the forward power position, and set the adjustment for full scale. Now, without touching anything, swap the coax connections so that the rig is connected to the ANT side of the meter, and the antenna is connected to the XCVR side. The reading you see on the meter will be very close to your real SWR.

"The closer to 1:1 your SWR is, the more accurate it will be. It would be more convenient to have a real SWR meter or antenna analyzer if you do a lot of testing, but for a quick antenna check the \$5 CB meters work OK.

"The theory is relatively simple. A basic SWR bridge is comprised of two couplers, each of which consist of a stripline or a pickup loop, and a detector diode. One coupler is used to detect forward power, the other coupler the reflected power. At 27 MHz, the precision of the components required isn't too stringent. Just about any diode will work, and minor imperfections in the stripline or pickup coils won't impact the accuracy that much. But at 2M minor differences between the striplines, stray capacitance, and the type of diode start to matter. By using just one of the couplers for both the forward and reverse readings any error that exists in that coupler is the same for both readings and thus cancels out. It's unlikely it'll work at 440 however, it's just too much to ask to expect a true 50 ohm network and zero bias or hot carrier diode in a cheap CB meter.

"The absolute reading on 2M may still be somewhat inaccurate, especially at high SWR but odds are you don't care about that. All you're interested in is 1:1 or as close to it as you can get, and for that the \$5 meters will be good enough."

Hams: This space is yours.

Did you build something?

Did you solve some problem?

Did you dream of a magnificent station?

What about that antenna that fell down -
why?

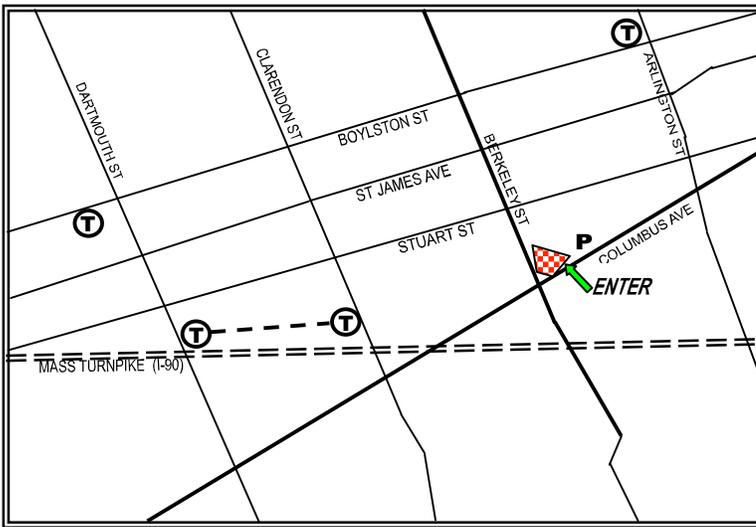
Other hams want to know!

Write it down and see your name in print.

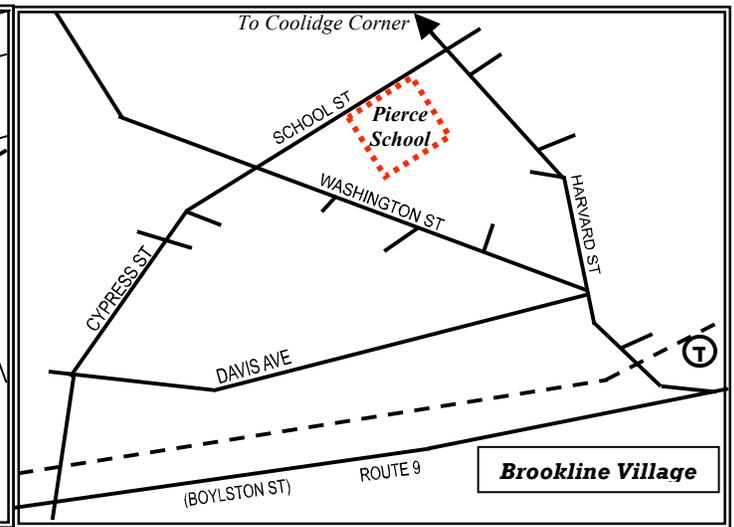


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General Meeting – Boston Salvation Army
Corner of Berkeley St. and Columbus Ave.



VE Session – Pierce School
50 School Street, Brookline, Room 110 next to the cafeteria

BARC Officers and Staff

President	(Vacant)		
Acting President	Bob Salow, WA1IDA	508.650.9440	walida@arrl.net
Vice President	Tom Bertolino, KB1OKP	781.395.5538	kb1okp@arrl.net
Secretary	(Vacant)		
Acting Secretary	Joe Harris, N1QD	781.844.8684	joseph.harris@comcast.net
Treasurer	Jim Clogher, N1ICN	617.364.4658	n1icn@arrl.net
Volunteer Exams	Jim Clogher, N1ICN	617.364.4658	n1icn@arrl.net
	Tom Bertolino, KB1OKP	781.395.5538	kb1okp@arrl.net
Public Service	Bob Salow, WA1IDA	508.650.9440	walida@arrl.net
Newsletter Editor	Paul Carter, N1TMF	617.232.6982	n1tmf@pvcronics.com
Programs & Activities	Phil Temples, K9HI	617.331.0183	phil@temples.com

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 a participant in Partnerships Advancing Technical Hobbies Which Attract Youth to Science (PATHWAYS). The Club is also an associate member of the Courage Handi-Hams system.

The Boston Amateur Radio Club publishes *The SPARC* monthly with information in the interest of BARC and Amateur Radio. The design and content are Copyright ©2009, 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.

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
Thu 8:30 pm	AMSAT 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

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