

## The SPARC

Newsletter of the Boston Amateur Radio Club

Volume XXI, Number 5; May 2009 http://www.barc.org w1bos@arrl.net



### Field Day? Fun Is Not Far Away

With only a few weeks to go, we have had a significant change in our Field Day plans. For 2009 we will hold Field Day at the **Bare Cove Fire Museum in Hingham**. It sounds far away, but it is really easy to get to – including by **T**.

The basic planning will remain the same as recent years. Start by thinking about how our 2008 Field Day went. We opted for a limited club 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. This year we will definitely set up and operate on **Saturday**, **27 June**, with an option on continuing through the night and/or on **Sunday**, **28 June**. Further details, including a map and travel directions will appear in the June issue of this newsletter.

Field Day is an ARRL-sponsored event held in the US and Canada to demonstrate for hams and the public our readiness for emergency communications support. The focus is to set up fully operational stations in the field, under any weather conditions, and contact as many other stations as possible. All this in the interest of having fun and showing ham radio to the public.

The present plan is for BARC to set up at least two HF stations and one VHF station, starting at 0900 on Saturday, 27 June. The stations will include everything from field power to radios, antennas, computers, and chairs to sit on. If you want to bring your own equipment, feel free, just coordinate the operation with the station manager.

To add to the jollity, BARC will hold its annual summer cookout in conjunction with Field Day. This is a combined opportunity to invite your family and friend(s) not only to experience radio in action, but also to dig into a social picnic. Beginning at 1200, hot dogs, hamburgers, sodas and the necessary fire and condiments will be provided by the club. If you want to bring your own food, the grill will be ready for you.

The fun is yours for the taking. We will be discussing it at our May and June General 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. The point here is that even if you hold a Novice or Technician license, you can operate on the HF bands and get the feel for your upgrade. We want everyone (ham or not) to get on the air.

Repeaters: 145.230 (-), PL 88.5 449.050 (-), PL 110.9

Bare Cove in Hingham is now accessible by the new MBTA Greenbush Commuter Rail Line. The train station is "West Hingham." The Fire Museum is about 1/3 mile in on a road directly across the street from the train platform. If it appears desirable, we may run a shuttle from the station. A convenient outbound train leaves South Station at 1103, and arrives at West Hingham at 1328. An inbound train leaves West Hingham at 1617, and arrives at South Station at 1653. A complete schedule can be found at:

 $www.mbta.com/schedules\_and\_maps/rail/lines/?route=GREE NBSH\&direction=O\&timing=U\&RedisplayTime=Redisplay+Time$ 

For planning purposes if you want to help or just attend, please let us know by the June General meeting on 18 June, or contact Field Day Chair, Tom Bertolino, KB1OKP. He can be reached at: kb1okp@arrl.net.

# Down With Signals That Should Not Be There! – Find Out at the May Meeting

Have you or your neighbors complained about hearing radio signals (from broadcast band on up) in a telephone, computer, television or other electronic equipment? At our May meeting John Garrett, WN9T, a professional audio engineer, will help us understand how we can identify the sources and how to stop this interference. There have also been reports of hearing radio sounds in tooth fillings and in a bathtub, but we will ignore these.

Our May General meeting will be held on 21 May. As usual, 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  $\mathbf{T}$  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 few 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.

Why didn't Noah swat those two mosquitoes?

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#### **Future BARC Meeting Dates**

(Third Thursdays at 7:00 p.m.)

21 May 2009 – General Meeting

4 June 2009 – Business Meeting

18 June 2009 – General Meeting

(no General Meetings in July and August)

3 Sept 2009 – Business Meeting

17 Sept 2009 – General Meeting

#### **New Repeaters for BARC**

-- John Garrett, WN9T

The two BARC repeaters have been replaced. On VHF, we have a Kenwood TKR 750, using our original frequency assignment of 145.230 MHz, CTCSS 88.5 Hz. On UHF, a Kenwood TKR 850. Our UHF frequency has been *changed* to 449.050, CTCSS 110.9 Hz to accommodate Department of Defense restrictions. Both transmitters run about 35 W.

The VHF repeater is operational, but still under study. At this writing, the UHF repeater has a receiver sensitivity problem, but it is being worked on. Your signal reports and other comments are valuable. Please let me and the club officers know your observations.

#### **Quarterly Business Meetings**

-- Bob Salow, WA1IDA

To manage our business, 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 **4 June**. All members are urged to attend and participate in club affairs. This is where club functions are discussed and decided – 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 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.

## **Membership Services**

BARC Membership Services has been an important, if quiet, function for many years. Handling the task is the team of Charlie Goumas, KB1RCN, and Rosie Goumas, KB1RCO. They can be reached at either **coasterrider@rcn.com** or **ronamoss@rcn.com**, or at 617.776.6249.

This is where you can go to get club information, technical guidance, or have new hams or other interested parties directed to the club. No, they may not have all the answers immediately, but they are your conduit to the answers.

Repeaters: 145.230 (-), PL 88.5 449.050 (-), PL 110.9

### **Nominating Committee for Election of Officers**

As directed in our bylaws, the election of officers will take place at our June meeting. On track to that, a Nominating Committee will be appointed at the April meeting. The members of this committee are: Hank Buccigross, K1QK, Chair; Tom Bertolino, KB1OKP; and Joe Harris, N1QD. The committee is to select a single slate for initial nomination of the four officers. This recommendation does not limit any further nominations from the floor. In fact, a competition for the offices is best so that each nominee would present qualifications and proposals to the members.

The Nominating Committee will report its slate at the May General meeting. Nominations remain open until balloting for each office by members at the June meeting.

## **HF Packet Experiment**

-- Cory Golub, N1URA

I am experimenting with a QRP HF packet station on 80 meters and I would like to have as many people as possible try to connect. I want to see how the station would operate as a backup mailbox in Maine, New England and perhaps farther, under low power operation using an NVIS antenna.

The packet station will remain on 3595.50 kHz until further notice. I am interested in knowing the location from which you are trying to access (town and state and/or grid number), signal report, type of antenna and polarization, and what time of day you tried to access the station.

I encourage people to try the station both during the day and night since 80 meters can react differently by time of day. The mailbox is N1URA-1 and is set at 300 baud packet. Please leave a message or email your observations to n1ura@arrl.net. Please pass the word to anybody you know who may be able to operate HF packet (either through a soundcard with MixW type software or using a TNC). You can also reach me at cory.m.golob@gmail.com .

#### **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.

Mike Freeman KB1SAM

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: wa1ida@arrl.net.

Red meat is not bad for you. Fuzzy green meat is bad for you.

#### Run of the Charles Paddled Smoothly

-- Tom Bertolino, KB1OKP

The Run of the Charles canoe and kayak races was held for the 27th time on Sunday, 26 April. BARC has coordinated ham communications for all but the first.

The event brings out hundreds of canoes, kayaks and over 1000 paddlers from around the country and Canada to glide down the Charles River between Needham and Brighton, sponsored by the Charles River Watershed Association. The river is interrupted numerous times by dams with dangerous consequences. That's where hams come in - along with CRWA volunteers – to monitor the safety of the participants. We supported the portages and the logistics of the event under a sunny but cool sky.

The hams who helped (and stayed dry) were:

Chris	K1HU	Keith	N1KLK
Hank	K1QK	Ralph	N1LAH
Allan	K1VQ	Paul	N1LRT
Sandy	KB1HAD	Andy	N1OSG
Jim	KB1JKJ	Gary	N1ZCE
Kathy	KB1LPW	Willie	N8WP
Rick	KB1LYJ	Jay	W1NEW
Steve	KB1OCI	Bob	WA1IDA
Tom	KB10KP	Russ	WB1DGS
Mike	N1EVH		



#### Bikes Rolling – Hams Needed

The annual triple bicycle rides for 2009 sponsored by Bikes Not Bombs will be held on **Sunday**, **7 June**. With routes of 15, 25 and 62 miles, safety communications are essential. We have supported this event for many years and our help has been requested again. Hams are posted at rest stops and in route vehicles. Hams are not assigned on the streets.

At the finish, a large party with food and entertainment is held for riders and volunteers. If you can lend a hand or have any questions, contact Bob Salow, WA1IDA, at **wa1ida@arrl.net** or 508.650.9440.

I used to eat a lot of natural foods until I learned that most people die of natural causes.

I used to have a handle on life, but it broke.

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### **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 - wa1ida@arrl.net or 508.650.9440.

- Bikes Not Bombs Bike Rides 7 June 2009 Boston and southern suburbs
- ► BAA Half Marathon 11 October 2009 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.

#### I See the Future

4534	DARGE 16
17 May	BARC Breakfast
17 May	MIT Flea (Cambridge)
21 May	BARC General Meeting
4 Jun	BARC Business Meeting
5-7 Jun	ARDF National Championships
7 Jun	Bikes Not Bombs Rides (Rp)
8 Jun	BARC VE Exams
18 Jun	BARC General Meeting
21 Jun	BARC Breakfast
21 Jun	MIT Flea (Cambridge)
27 Jun	BARC Field Day & BBQ
19 Jul	BARC Breakfast
19 Jul	MIT Flea (Cambridge)
16 Aug	BARC Breakfast
16 Aug	MIT Flea (Cambridge)
3 Sep	BARC Business Meeting
14 Sep	BARC VE Exams
17 Sep	BARC General Meeting
19 Sep	RIFMRS Flea (Forestdale RI)
20 Sep	BARC Breakfast
20 Sep	MIT Flea (Cambridge)
11 Oct	BAA Half Marathon (Rp)
16-17 Oct	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 more information, the "Ham-Electronic Flea Market" and the "PSLIST" lists can be consulted.

### **US ARDF National Championships in Boston**

-- ARRL Letter, 17 Apr 2009

If you like the competitive spirit of radiosport, and you have a hankering for the big outdoors, why not try Amateur Radio Direction Finding (ARDF)? All you need to get started in competitive ARDF is your running shoes, a set of headphones attached to a receiver, a map or compass and a small handheld directional receiver. Now run through a course in a forest or on a trail, and try to find several hidden transmitters as fast as possible.

The ARDF National Championships will be held in the Blue Hill Reservation on the weekend of 5 – 7 June. Registration is now open, check **www.bostonardf.org/** for details. Radio-orienteerers of all skill levels will gather for a practice day, followed by two days of competition - first on 2 meters and then on 80 meters. This year's USA Championships will be combined with the IARU Region 2 championships. The events are open to everyone, with or without a ham license. To encourage first-timers and foreign visitors, the competition fee will be waived for persons who have never participated in the USA ARDF Championships, and for competitors coming from outside North America. You can learn more about ARDF at www.homingin.com/.

#### **Have Breakfast With BARC**

NOTE: The breakfast date is now on the third Sundays.

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 1030 (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!

## Badges - Get 'em While They're Hot

New club badges are available 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.

#### Jim, KB1MZE, SK

We have just received the sad word that Jim Bloom, KB1MZE, has died. Jim had been a member of BARC for several years. He had been active on the repeater, but attended few meetings because of his illness. Jim will be missed

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#### **Gunstock Mountain Node Now Operational**

-- Rick Zack, K1RJZ

We placed into service the southern link to the Gunstock Mountain 6M repeater which natively covers north to Franconia Notch, NH and south to the Mass Pike. In service is the "Hopkinton Node" with the antenna height at 734 feet above MSL, and one mile south of the start of the Boston Marathon.

We now have continuous 6M mobile to mobile coverage from Franconia Notch to the Cape Cod Canal with only two full-time linked repeaters. This system was actually designed from day-one to allow NOAA Grey ME to talk to NOAA in Taunton, MA and that was a key premise for us to obtain site access. It is sponsored by the Central NH ARC.

Gunstock Mtn, NH user RX 53.77 MHz, PL 100.0 Hz Gunstock Mtn, NH user TX 53.07 MHz, PL 71.9 Hz

Hopkinton, MA user RX 51.74 MHz, PL 100.0 Hz Hopkinton, MA user TX 51.24 MHz, PL 71.9 Hz

#### Important Notes:

- The Hopkinton 6M frequencies may seem odd but they are not. All 6M repeaters below 52 MHz are at a 500 KHz offset and not 1 MHz offset as above 52 MHz.
- To clarify, this system does not link to Mt. Uncanoonuc 6M as originally planned because Gunstock itself exceeds Unc's coverage.
- When using Hopkinton, MA, commercially converted radios with "squelch tail elimination" will have a very pleasing drop sound upon TX unkey while ham radios that just happen to cover six-meters will have a much longer noise burst. That's just the way that they work.

Please do join CNHARC's regular 6M net Thursdays at 0800 so we can see how this system plays.



# 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



#### The CDC Says:

#### What can I do to protect myself from getting sick?

There is no vaccine available right now to protect against this new H1N1 virus. There are everyday actions that can help prevent the spread of germs that cause respiratory illnesses like influenza. Take these everyday steps to protect your health:

- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
- Wash your hands often with soap and water, especially after you cough or sneeze. Alcohol-based hand cleaners are also effective.
- Avoid touching your eyes, nose or mouth. Germs spread this way.
- Try to avoid close contact with sick people.
- Stay home if you are sick for 7 days after your symptoms begin or until you have been symptom-free for 24 hours, whichever is longer. This is to keep from infecting others and spreading the virus further.
- Follow public health advice regarding school closures, avoiding crowds and other social distancing measures.
- Be prepared in case you get sick and need to stay home for a week or so; a supply of over-the-counter medicines, alcoholbased hand rubs, tissues and other related items might could be useful and help avoid the need to make trips out in public while you are sick and contagious.

## What is the best way to keep from spreading the virus through coughing or sneezing?

If you are sick, limit your contact with other people as much as possible. Do not go to work or school if ill for 7 days or until your symptoms go away (whichever is longer). Cover your mouth and nose with a tissue when coughing or sneezing. It may prevent those around you from getting sick. Put your used tissue in the waste basket. Cover your cough or sneeze if you do not have a tissue. Then, clean your hands, and do so every time you cough or sneeze.

## What is the best technique for washing my hands to avoid getting the flu?

Washing your hands often will help protect you from germs. Wash with soap and water or clean with alcohol-based hand cleaner. We recommend that when you wash your hands - with soap and warm water - that you wash for 15 to 20 seconds. When soap and water are not available, alcohol-based disposable hand wipes or gel sanitizers may be used. You can find them in most supermarkets and drugstores. If using gel, rub your hands until the gel is dry. The gel doesn't need water to work; the alcohol in it kills the germs on your hands.

## How long can influenza virus remain viable on objects (such as books and doorknobs)?

Studies have shown that influenza virus can survive on environmental surfaces and can infect a person for up to 2-8 hours after being deposited on the surface.

Repeaters: 145.230 (-), PL 88.5 449.050 (-), PL 110.9

#### What kills influenza virus?

Influenza virus is destroyed by heat (167-212°F [75-100°C]). In addition, several chemical germicides, including chlorine, hydrogen peroxide, detergents (soap), iodophors (iodine-based antiseptics), and alcohols are effective against human influenza viruses if used in proper concentration for a sufficient length of time. For example, wipes or gels with alcohol in them can be used to clean hands. The gels should be rubbed into hands until they are dry.

#### **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 5.

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.

The needed FCC forms will be provided.

For further information, contact:

Jim Clogher, N1ICN, 617.364.4658 n1icn@arrl.net Tom Bertolino, KB1OKP, 781.395.5538 kb1okp@arrl.net

#### **Future Exam Dates**

(Second Mondays at 7:00 pm)

13 April 2009

11 May 2009

8 June 2009

(Exams are omitted in July and August)

14 September 2009

#### It's Antenna Time

-- Dan Romanchik, KB6NU

Here in Michigan, the daffodils are blooming and the birds are singing. That means only one thing--it's antenna time! Since my lot is a city lot and not really suited to towers, I mostly play around with wire antennas. Currently, I have a random wire for 80m, a wire ground plane for 20m, and a 40m/30m "fan dipole" that also loads up on 15m and 10m. This year, I want to experiment with two new wire antennas--a horizontal loop and Windom antenna.

Loop Skywire The concepts behind the full-wave loop antenna have been known for many years, but the antenna has become more popular after the publication of the article, "The Loop Skywire" in the November 1985 issue of QST. This article is available as a .pdf from the ARRL website, if you are a member (www.arrl.org/members-only/tis/info/pdf/8511020.pdf). A lot more information is available on the Internet. Just Google "loop skywire," and you'll find hundreds of references.

Basically, the antenna is a full-wave loop of wire for the lowest band that you wish to operate. For 80m, that would be about 272 feet. For 40m, the length will be 136 feet.

Ideally, you'd like to set up the loop so that the area inside the loop is at its maximum. This occurs when the loop is a circle. Unfortunately, that's usually impractical. From a practical point of view, most hams shoot for a square configuration using four supports.

Another consideration is how to feed the antenna. The Loop Skywire article calls for a coax feedline, but the practice these days seems to favor ladder line. The reason for this is that the SWR on bands higher in frequency than the band for which the antenna was cut can be quite high. Coax is quite lossy when the SWR is high, but that's not the case with ladder line.

How does it perform? Well, it's been my experience that hams with loop antennas often have the strongest signals here at KB6NU - And they seem to get through even when band conditions are poor. Those who use them also report that they are great DX antennas as well. So, all things considered, it sounds like it's worth a shot.

**Windom Antenna** The Windom antenna is one that I've just become familiar with. It's intriguing because, like the loop antenna, it is also a multi-band antenna.

The Windom is a half-wavelength antenna, but instead of feeding the antenna in the middle as you would a dipole antenna, you feed it about 1/3 of the way from one of the ends. At this point, the feedpoint impedance is about 200 ohms. With a 4:1 balun, you can feed it with 50-ohm coax.

The interesting thing about this antenna is that the feedpoint impedance is 200 ohms not only on the fundamental frequency, but it's close to 200 ohms on all harmonics of that frequency. So an antenna cut for 40m, will also have a feedpoint impedance close to 200 ohms on 20m, 15m, and 10m.

You do need a 4:1 balun for this antenna to operate properly. Fortunately, these are not difficult to make. I made one a couple of years ago, just for fun (http://kb6nu.com/even-more-fun-with-baluns/). Now, I have an application for it!

There are all kinds of information on the Net about the Windom antenna as well. One of the Web pages I found most useful was written by W8JI (www.w8ji.com/windom\_off\_center\_fed.htm).

I certainly have my hands full this antenna season. Whatever you decide to put up, remember to be safe.

## **New FEMA EMI - IS Programs Offered**

The FEMA Emergency Management Institute Independent Study Program is pleased to announce the launch of three new courses. These courses are:

- IS-197.EM: Special Needs Planning Considerations for Emergency Management
- IS-26: Guide to Points of Distribution
- IS-836: Nuclear/Radiological Incident Annex

To complete these courses, go to http://training.fema.gov and click on 'FEMA Independent Study' in the green bar. Scroll down to the bottom of the page to see all of the new courses or click on 'ISP Course List' in the red box to see all courses that are available. If you have any questions, contact the Independent Study Office via email at independent.study@dhs.gov or by phone at 301.447.1200 during normal business hours of 0730 to 1930 ET, Monday through Friday, excluding federal holidays.

#### **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)
1 col x 4 in. (1/2 column)
1 col x 9.5 in. (full column)

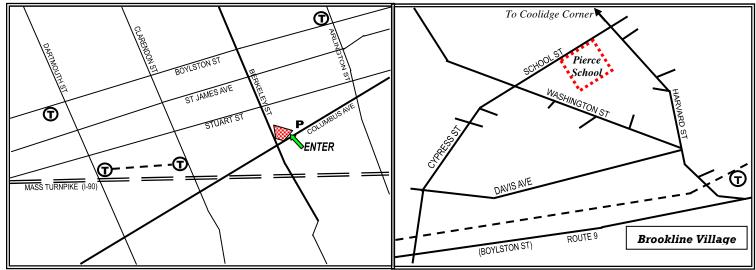
\$15 per issue
\$75 per 6 consecutive months
\$125 per 12 consecutive months
\$30 per issue
\$60 per issue

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

#### 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.

Repeaters: 145.230 (-), PL 88.5 449.050 (-), PL 110.9 Simplex: 147.420



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

Simplex: 147.420

	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	kblokp@arrl.net		
Secretary	(Vacant)				
Acting Secretary	Joe Harris, N1QD	781.844.8684	joseph.harris@comcast.net		
Treasurer	Jim Clogher, N1ICN	617.364.4658	nlicn@arrl.net		
Volunteer Exams	Jim Clogher, N1ICN	617.364.4658	nlicn@arrl.net		
	Tom Bertolino, KB1OKP	781.395.5538	kblokp@arrl.net		
Public Service	Bob Salow, WA1IDA	508.650.9440	wa1ida@arrl.net		
Membership Services	Charlie Goumas, KB1RCN	617.776.6249	coasterrider@rcn.com		
	Rosie Goumas, KB1RCO	617.776.6249	ronamoss@rcn.com		
Newsletter Editor	Paul Carter, N1TMF	617.232.6982	n1tmf@pvctronics.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.

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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		
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		

Repeaters: 145.230 (-), PL 88.5 449.050 (-), PL 110.9