

Amateur Radio - Communicating Worldwide for A CenturyNewsletter of the Boston Amateur Radio Club

Serving Hams in the Greater Boston Area

December 2012 - VOLUME 24, NUMBER 12

www.barc.org - w1bos@arrl.net



Message from the President - Joe Chapman, NV1W

December is an appropriate time for looking back. 2012 has been a good year for us. I've certainly enjoyed the speakers at our monthly meetings, as well as other club activities from Field Day to SKYWARN Recognition Day. I've also been encouraged by the new members we've added, especially those who have been getting more involved in BARC.

Congratulations to everyone who in the past year upgraded licenses, received operating awards, or worked long-sought DX with some Godforsaken windswept crag.

I want to mark two recent transitions. Bob Salow, WA1IDA, is in the process of handing off the club's coordination of Public Service to Brett Smith, AB1RL. Bob is, of course, the founding President of BARC, and still tirelessly devoted to the club and to our hobby. Public service is one of the noblest traditions of Amateur Radio, and Bob's huge expertise in this area continues to be invaluable at the events we serve. Along with everyone I wish Bob and Elaine the best on their annual winter migration and look forward to seeing them return with the robins in the spring.

Also, Hank Buccigross, K1QK, is turning over the Contact Volunteer Examiner role to Linda Blair, NA11. During Hank's tenure we've gone from having a shortage of VEs to having a stable and enthusiastic group on which to draw, and we've also put together a schedule for next year that will provide options such as Saturday morning exams for people in the immediate Boston area. Hank has efficiently managed the bureaucratic side of the job and has been welcoming to those taking their first Technician exam.

This is membership renewal time, and I'd like to put in a word for donations. BARC is not a wealthy club, though it is well-run financially. Our membership includes people on fixed or limited incomes, and the Executive Committee accordingly prefers to keep annual dues affordable. Our expenses include the maintenance of the club repeaters, which not only provide a service to hams in the Boston area, but also serve as an important emergency asset. (During Superstorm Sandy, 145.230 was busy all day.)

The generosity of those members who are able to tack on an extra donation goes a long way toward allowing us to operate without financial headaches. My thanks to all those who support us in this way, and I encourage others to give the idea their thoughtful consideration.

I look forward to seeing everyone at the holiday party, and wish you a happy and healthy 2013.

Joe Chapman, NV1W

You Can Be the Attraction at the January Meeting

Did you solve a ham radio problem recently? Got a project you are working on? Did you build something that improves operating? How about new proven way to help new hams? It may be a surprise to you, but the rest of us want to know what you have done.

Our January General meeting on **Thursday, 17 January** is the time and place for you to show and tell us your achievements. If you need any projection equipment, we have it, just let Joe, NV1W, know.

Minutes of the BARC Business Meeting, 6 December 2012 - Recorded by Joe Harris, N1QD

Attendees:

Joe Chapman, NV1W, President
Linda Blair, NA1I, Vice President
Jim Clogher, N1ICN, Treasurer
Joe Flaherty, W1JJF
Frank Murphy, N1DHW
Bob Salow, WA1IDA
Joe Harris, N1QD, Secretary

The Meeting was called to order at 1913.

President:

 NV1W reports that he is in the process of gathering speakers for 2013 General meetings. January's meeting will be a show and tell.

Treasurer:

• The club's current balance is \$2822.18 as of December 6, 2012.

Repeater:

The UHF machine was removed from the repeater site and is out for repair.

Public Service:

- NOAA has downloadable certificates for Skywarn Recognition Day available.
- WA1IDA reports that the next public service event is the MS Boston Walk in April. KB1JKJ or KB1LYJ will
 coordinate hams for this event.

Old Business:

Meeting dates and locations

 NA1I reports that she has not heard from Brookline Police yet to confirm the 2013 meeting dates. (Edthese dates have been since confirmed. See elsewhere in this issue for details.)

New Business:

Proposed Bylaw amendments

 WA1IDA proposed three Bylaw amendments regarding club membership. Two of these amendments were approved by the Executive Committee and will be brought before the general membership for review at the January General Meeting. The details are shown below. The third amendment was tabled for further review.

Repeaters

KB1EKN reports that the receiver in the UHF repeater has failed. A motion was passed to authorize up to \$500 in expenses to return the UHF repeater to service.

Field Day

- N1QD reports that the two HF bandpass filters that were purchased before Field Day were also beneficial
 at SKYWARN Recognition Day. He recommended that the club continue with the original plan of
 purchasing filters for all bands 80 10.
- A motion was passed authorizing the purchase of an HF triplexer for use at Field Day.

The meeting adjourned at 2037.

BARC Growth

It's a rare month when we fail to add or upgrade a few 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.

Carl Aveni N1FY
Frank Brangiforte
Andy Cowan ABOYT
Chet Freeman KB1VJT

Rob Macedo KD1CY Sam Vernon KB10EJ

Please welcome 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 upgrade and 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>.

BARC Meeting Calendar for 2013 - Linda Blair, NA11, Vice President

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

January 17	Thu	7:00 pm
February 20	Wed	7:00 pm
March 20	Wed	7:00 pm
April 18	Thu	7:00 pm at the Clay Center in Brookline
May 16	Thu	7:00 pm
June 20	Thu	7:00 pm
September 19	Thu	7:00 pm
October 17	Thu	7:00 pm
November 21	Thu	7:00 pm

The December General meeting is omitted in favor of the BARC Holiday Party.

VE Sessions

January 19	Sat	10:00 am
March 16	Sat	10:00 am
May 13	Mon	7:00 pm
July 8	Mon	7:00 pm
September 9	Mon	7:00 pm
November 16	Sat	10:00 am

Business Meetings

March 6	Wed	7:00 pm
June 6	Thu	7:00 pm
September 5	Thu	7:00 pm
December 5	Thu	7:00 pm

Proposed Bylaw Amendments

The following BARC Bylaw amendments have been approved by the Executive Committee at the December Business Meeting. They will be discussed and voted on at the January General meeting:

Proposal 1

Section 2: Conditions Of Membership

Add paragraph:

The Executive Committee may confer a free Regular Membership upon a person who has been a speaker or presenter at a club meeting. Such membership term shall complete the current fiscal year and extend to the end of the next fiscal year. If this person is already a member, dues shall be forgiven for the next fiscal year.

Proposal 2

Partial Year Membership Dues

Dues paid after June 30 shall be eligible for a rate of one half ($\frac{1}{2}$) of the amount for the full year. A member paying such amount shall be eligible for full membership benefits the same as if the full year rate were paid.

Propose changing date to July 31.

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 suitable for hams who are new to helping at such events as well as experienced hams. For 2013, we have already been tasked with several events which will be announced later. Feel free to contact Brett Smith, AB1RL, at 859.466.5915 or ab1rl@arrl.net>.

- ➤ Multiple Sclerosis Boston Walk 7 April 2013 (Boston/Cambridge)
- *▶* BAA 5K and 1 Mile Races **14 April 2013** (Boston)
- > Run of the Charles 28 April 2013 (Charles River, Needham to Brighton)
- ➤ Multiple Sclerosis Journey of Hope 18 May 2013 (Natick)
- ➤ Boston Brain Tumor Bike Rides 19 May 2013 (Waltham to Carlisle)
- ▶ BAA 10K Race 23 June 2013 (Boston)
- ▶ 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.

Special Event Station Celebrating the End of the World! -- Ron Litt, K5HM

That's right, the end is finally near. According to one of the three Mayan calendars, the End of the World will occur on 21 December 2012. To celebrate this literally once in a lifetime event, Special Event Station NOD (Now Zero Days) will be activated on 10 through 80 meters, and on several satellite passes for three days during and after(?) the end of the world. On 20 December will be a celebration of the end of the world. On 21 December, the day of destruction, we will be on the air as long as possible. It would seem 22 December is a little iffy right now.

Amateur Radio stations around the crumbling globe are invited to contact NOD, which will be operating from a secret, undisclosed location. Our operating schedule may be a little erratic as destruction rains down upon us and as long as our antennas hold out. For those who may be looking skyward for the end of the world, NOD will be operating on several satellite passes.

You can celebrate Doomsday by contacting NOD directly on the air. QSL with SASE to KK5W. If Doomsday actually does happen, we regret that a QSL will not be possible, so hold on to your SASE until the 22nd at least. Check out our website for a preview of the NOD QSL card.

Amateurs can also become an official Doomsday station by registering on our website. You will be given a registration number and the authority to identify yourself as "Official Doomsday Station," followed by your Doomsday number. Official Doomsday stations will receive the Doomsday Station Certificate.

It is not entirely clear exactly how it will happen. Will it be a cataclysmic shift in the earth's magnetic field, Global Warming on steroids, earthquakes, volcanoes, floods, global thermonuclear war, meteor collision, the ten plagues of Egypt, UFO invasion, who knows? There are scientists, soothsayers and philosophers on both sides of the question. Either way it will be an event worth remembering... or maybe there will be no one left to share your memories with!

This will provide cosmic, maybe even intergalactic coverage for the end of the world as we know it. Our Doomsday Special Event has been picked up by the AMSAT News Service and will be carried in a future bulletin. More information is available on the official NOD website, <www.nowzerodays.com>.

You can also email the NOD team at <nOd.doomsday@gmail.com>.

Dan Builds an End-Fed, Half-Wave Antenna -- Dan Romanchik, KB6NU

I've always been interested in end-fed, half-wave antennas before, but until this recently, I'd never built one. One of the reasons for this is that most designs are for QRP antennas and not made to handle more than 5 to 10 W of power.

A couple of months ago, though, I ran across a design rated at 100 W http://earchi.org/proj_homebrew.html. The design seemed relatively simple to build, requiring only a single toroid and a capacitor made with a short length of RG-174 coax. Well, it just so happens that I bought 100 feet of RG-174 at Dayton this year, and I found the toroid cores online from the "Toroid King" for a very reasonable price, so I decided it was high time to build this antenna.

All told, the parts cost about \$10, the biggest part of that being a 4 x 4 x 2 inch plastic junction box (Carlon E989NNJ-CAR) I got at Lowe's for \$6.41. Compare that with the \$60 that LNR wants for their end-fed antenna.

I put up the antenna about three weeks ago, on a beautiful fall Sunday, running 34 feet of wire up a trellis attached to a small deck in my backyard, then out to a tree near the back of my lot. With more than a little anticipation, I put the antenna analyzer on it, only to be somewhat disappointed with the readings. The SWR was 2.6:1 at 14.000 MHz, dropping to about 1.5:1 at 14.900 MHz.

Since the internal tuner on my IC-746PRO is supposed to be good to 3:1, I did use it and made a couple of contacts. A guy in MA even gave me a 599 signal report. So, while I was a little uncomfortable with an SWR so close to the limit of my tuner, it did seem to radiate pretty well.

I emailed the guy who published the design and asked why he thought the resonant frequency was so high, and he said that all I had to do was add a couple feet of wire to the antenna. I also did some more reading about end-feds and several websites suggested that adding a counterpoise might be a good idea, too.

A week later, I finally got back to playing with the antenna. I added 24 inches of wire to it, and it did indeed bring down the SWR of the antenna to below 2:1 in the CW portion of 20M. I'm happier with this. I made a couple of contacts that day, too, with both stations giving me good reports.

I still do plan to try a counterpoise. Not so much to improve the SWR, but to see if it makes the antenna a little more efficient.

Overall, this has been a fun project. I learned something about end-fed, half-wave antennas and saved a bunch of money by rolling my own. Isn't that what ham radio is all about?

When he's not messing with antennas, Dan, KB6NU, publishes the "No-Nonsense" series of Amateur Radio license study guides. The latest in this series is the No-Nonsense Extra Class License Study Guide. For more information, go to kwww.kb6nu.com, or email kb6nu.com.

It's Time for Membership Renewal

Our annual membership renewals are on a calendar year. The BARC Executive Committee has decided to have no change in the dues structure for 2013. The basic full year membership fee for regular members continues at \$25.00. Junior, senior and family memberships are set accordingly. There is also an adjustment for the latter half of the year.

If you have not yet renewed your membership for 2013, a Membership Information form is included with this issue of the newsletter. Be sure to complete the form when submitting your dues as the data is necessary for statistical purposes and to notify you with important information. To assist the Treasurer with his burden, please return it promptly with your dues.

Please note that completion of the Membership Information form each year assembles not only your identity, but certain statistical data that is important for the orderly operation of our club. The form is the tangible link for the Treasurer and the database to confirm your dues payment.

BARC accepts PayPal. If you want to renew your membership online, just go to <www.barc.org/membership.html>, or click on the membership link on our home page. You can use this to pay your dues or make donations with a credit card (even if you do not have a PayPal account), from your PayPal funds, or from your linked bank account. Our PayPal address is <w1bos@arrl.net>.

NASA Has Revised the Sunspot Cycle -- ARRL Contest Update, 7 November 2012

From a recent ARRL Propagation Bulletin by Tad, K7RA, we learn, "NASA has a revised forecast for the peak of Cycle 24, and it looks very interesting. Instead of a peak in Spring 2013, with a smoothed international sunspot number of 60, the peak is now predicted for Fall 2013, with the smoothed sunspot number prediction revised to 76, about 27% higher. Perhaps Cycle 24 will have a double peak, the first being in Fall 2011 and the second in Fall 2013." The unusual behavior of this cycle appears to be caused by internal processes in the sun's north and south hemispheres getting progressively more out of phase.

Maps For Hams -- ARRL Contest Update, 7 November 2012

Here is a great present for hams with an interest in maps and why they look the way they do. Seeing Through Maps - Many Ways to See the World by Wood, Kaiser, and Abramms is published by ODT at <www.odt.org> which also offers many other interesting map-related products for hams.

For Sale (to help subsidize a bigger antenna): Hy-Gain 18-AVT Vertical Antenna

5-band, HF vertical, stands about 25 feet tall.
Asking \$40/Best Offer
(More flexible pricing if you come and help remove it!)
Contact Eric, K1NUN, at <k1nun@netscape.net>, or leave a message at 508.659.6146.





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)
\$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.

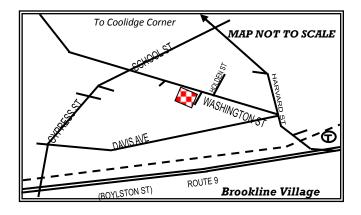
Quarterly Business Meetings -- Bob Salow, WA1IDA

We have 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 **7 March 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





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 VE session schedule is being revised to suit the needs and interests of the applicants and examiners. The 2013 exam session schedule is shown elsewhere in this newsletter issue. Note changes in date, time and place. 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 <u>and</u> 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)

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



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 January issue must be received by January 5.

I See the Future

17 Jan BARC General Meeting
 19 Jan BARC VE Session – Saturday AM
 16 Feb AARC Flea (Marlborough)
 20 Feb BARC General Meeting – Wednesday 7:00pm
 2 Mar MtTom ARA Flea (Feeding Hills)
 7 Mar BARC Business Meeting
 21 Mar BARC General Meeting

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.

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, 617.364.4658; 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.

The SPARC is published monthly by the Boston Amateur Radio Club. The design and content are Copyright 2012, 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

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

Repeater: 145.230 (-) CTCSS 88.5 Simplex: 147.420

9



Dues \$ _____

DB by ____

Boston Amateur Radio Club

MEMBERSHIP INFORMATION - 2013

Members: if you have already renewed for this year, please use this form to have a friend join.



PEOPLE WORD	Please do not om	nit any items below	/	NewRe	enewal		
Full name			Call sign	;			
Name used on the air	ir		Evening]	phone ()		
Address			Daytime	phone ()		
			Cell phon)		
City/Town		State ZIP (9 dig					
•			lis)				
	4887				#POP##N#		
LICENSE CLASS Novice	ARRL MEMBERSHIP	The BARC membership list is club use only, including publ	olishing	To save the club	IPORTANT: b significant costs and effort,		
Technician	Life	the roster to our members on	nly. Do	the club now pu	ublishes its newsletter only		
General Advanced	Life Annual	you wish to restrict such lind distribution:	mited	email to link to	ill be notified monthly by a web page where the		
Extra	Not a member	distribution.	,	earliest posting	will be available.		
Former ham Not yet a ham	EMCOMM?	OMIT ADDRESS	,	of local and gen	, <i>The SPARC</i> , is the source neral ham radio news and		
	1 2 3	UMIII ADDRESS	,	official club info	formation.		
Are you an ARRL certified	Have you taken	OMIT EVENING PI	MONE		ssential that for this fast and n, that you indicate above		
VE?	ICS-700? YES NO	OMIT EVENT.	HUNL	your best email			
YES NO		<u> </u>	Full VI	ear 2013 if paid	Half year 2013 if paid		
Mε	embership Catego	ory	ŀ	ear 2013 If paid between 12 to 31 July 13	between		
REGIILAR MEMF	BER: Not otherwise quali	lified helow		12 to 31 July 13 5.00	1 Aug 13 to 31 Oct 13 1 \$12.50		
	R: Are you under age 18?		J. '	2.50 ¦	\$ 6.50		
	R: Are you over age 64?		4' '	2.50	\$ 6.50		
	ER: [Regular member I liv		\$12	2.50	\$ 6.50		
I am the family member to receive club mailings YES NO Note: Each member in the family must complete a separate form.							
If you are able, please help support the club's activities and repeaters:							
			To	otal \$	•		
Sianature		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 BOSTON AMATEUR RADIO CLUB							
year shown on the newsletter address label. > Make checks payable to: ROSTON AMATEUR RADIO CLUB PO Box 15585					585		
> Please write your call sign on your check.							

Addl \$ _____ Recd by _____

Memb Nr ___

Date _____

Date ____

Gratuitus est per

Loc_