



Amateur Radio - Communicating Worldwide for A Century

ter of the Boston Amateur Raa



Newsletter of the Boston Amateur Radio Club January 2011 - VOLUME 23, NUMBER 1 www.barc.org - w1bos@arrl.net

Message from the President -- Tom Bertolino, KB1P, President Happy New Year! May 2011 be safe and prosperous for all.

BARC's Holiday Party at the Stockyard Restaurant was a great success. My thanks go to Joe, N1QD, who set up the party and was the club's point of contact with the Stockyard Restaurant; and Mike, N1IST, who collected reservation information and who procured the plaques for our awardees - a great job guys.

There were three awards given at this year's event. They were: Jim Bradley, 3 KB1JKJ, Ham of the Year; Bob Salow, WA1IDA, Life Time Membership; and Paul 3 Carter, N1TMF, Award of Appreciation for long time editing of The SPARC. 3 Congratulations to all.

We are always looking for members to write articles for The SPARC or to be a guest speaker for one of our General meetings. Our club possesses a wide variety of members who are interested in unique facets of the hobby. Over the last year I have talked to members who are very experienced in CW operations, contesting, satellite communications, and public service. All of these hams possess valuable information that can help our members who may be interested in getting started one of these areas, solve a problem, or help a member improve in one of these areas.

If you are one of these hams whose interest falls into one of these areas, or $_8$ another unique area, why not write an article for The SPARC or give a $_8$ presentation on your subject at one of our General meetings. Your article or

Inside This Issue

- 1 Message from the President
- 1 It's Time for Membership Renewal
- Bob Salow Receives Lifetime Membership Award
- 2 N1TMF is Appreciated
- 2 KB1JKJ Named 2010 BARC Ham of the Year
- 2 Testing Needed for New 70cm Repeater Freq
 - W10HM Elected to NH Legislature
- Is Ham Radio Dying?
- 3 Can a VE Session Be More Than Handling the Paperwork?
- 4 Looking Ahead At Public Service
- 4 Own a Piece of History
- 5 BARC Growth
- 5 BARC Volunteer Exam Sessions
- 5 Free TA-33 Antenna
- 6 BARC Officers and Staff
- 6 <u>I See the Future</u>
- 7 ARRL in Action: New Amateur Radio Bill Introduced in Congress
 - Contest Operating Tip
- 3 <u>Cardiopulmonary Resuscitation</u>

presentation can provide an introduction to other hams on your area of expertise. You could offer your unique experience on how you got started in your area of interest, point out lessons learned, and possibility help a newbie save some money. Maybe your article or presentation will open someone eyes to another way to enjoy this hobby. If you are interested you can contact me at **kb1p@arrl.net**.

It's Time for Membership Renewal

The BARC Executive Committee decided to have no increase in the dues structure for 2011. 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 2011, 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.

BARC accepts PayPal. If you want to renew your membership on-line, just go to <**www.barc.org/membership.html**> or click on the membership link on our home page. You can use this to pay for membership 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**>.

Bob Salow Receives Lifetime Membership Award -- By Hank, N1QK

Bob Sallow, WA1IDA, was presented the Boston Amateur Radio Club Lifetime Membership Award at the club's annual

Holiday Party. Bob, as BARC's founding president, has been responsible for a wide variety of club activities. He has held several key positions in the club since its inception. He is the club's historian, the keeper of club records and its membership database.

Bob's work at these "behind the scenes" positions has kept the club running smoothly through the years and allowed the club to transition easily between presidents. As a result of his attention to detail when supporting public service events he has earned the club an outstanding reputation with event coordinators. In addition as the club's Public Service Officer he created a database of volunteers that is the envy of every club that supports events.

Bob has held several positions with the ARRL Most recently he accepted the job of Public Information Officer for the Eastern Massachusetts Section.

Bob lives in Natick with his wife Elaine (Chase) N1GTB.

N1TMF is Appreciated

Paul Carter, N1TMF, had edited the club newsletter for more than ten years before retiring at the end of 2009. His service was recognized at the 2010 Holiday Party with a plaque and the clubs gratitude.

KB1JKJ Named 2010 BARC Ham of the Year

Jim Bradley, KB1JKJ, was named BARC Ham of the Year for 2010 by membership vote. The presentation of a plaque was made at the BARC Holiday Party on 16 December. The award was made in the presence of an honor guard of all attending prior recipients of this honor.

Jim has stepped in to successfully publish the club newsletter, including several improvements in the overall appearance. Hearty congratulations and our thanks to Jim.

Get Ready

The International Earth Rotation and Reference Systems Service has determined that if the Earth's rotation has slowed sufficiently, 30 June 2011 may be the date to insert a leap second to maintain the accuracy of atomic clocks. This advance notice is provided so you can be ready to adjust all your clocks and watches when the time comes.

BARC Newsletter Is Green – and Saves Money

Effective with the January 2011 issue, this newsletter, the official source of BARC news (and other interesting tidbits), will be distributed exclusively online. It will be a significant saving of costs, effort and trees. Readers will be notified monthly by email to link to a web page where the earliest posting of The SPARC can be read. Of course, this makes it necessary for all who will receive The SPARC to provide their best email address on the 2011 Membership Information form. We thank you for your cooperation.

Your Testing Is Needed for the New 70cm Repeater Frequency -- Bob Salow, WA1IDA

We have now been assigned a new frequency pair for our 70cm repeater. Your help is needed to verify the coverage and signal quality. At several times of the day, please try to make contacts and get signal reports. Make notes of your location, the type of radio, the power used, and the reported signal quality. Send this information to Tom Bertolino, KB1P, at **kb1p@arrl.net** or call him at 781.608.6186.

The new frequency is: 443.550 MHz (+), PL 110.9 Hz. Check it out.

Repeaters: 145.230 (-) CTCSS 88.5

Based on these reports and other measurements, further tuning and other improvements are in progress. Please continue checking and reporting to help make this repeater fully operational.



Jim KB1JKJ, Bob WA1IDA, and Paul N1TMF

Simplex: 147.420

W1OHM Elected to NH Legislature

BARC's own, Bill Ohm, W1OHM, has been elected as a State Representative in the New Hampshire House. He represents Nashua Wards 5, 8 and 9.

Bill, a very active ham, has operated at many BARC events, particularly Field Day and SKYWARN Recognition Day at the Blue Hill Observatory. We wish him well.

Is Ham Radio Dying? -- Dan Romanchik, KB6NU

If you've been around ham radio for even a year or two, you've no doubt heard or participated in the debate as to whether or not ham radio is dying. The question is as perennial as the grass.

Recently, this was a topic of discussion on the ARRL PR mailing list. Allen, W1AGP, the ARRL's Media & PR Manager, compiled a list to show that ham radio is *not* dying. It showed the number of licensees in the US every year from 2005 to 2009:

2005: 661,000	2006: 655,000	2007: 655,000
2008: 662,000	2009: 681,000	2010: 694,000!

This chart as shown is a good example of how you can lie with statistics. The numbers started at 640,000, so the rate of increase in the number of licensees looked quite dramatic. Even so, the good news is that the number of licensees is quickly approaching 700,000, and should surpass that number shortly.

Upon seeing this chart, Jerry, N9TU, did a little statistical analysis of his own. Of the 83 licensees in his Zip Code, nine are deceased and one has expired. There are four Novices, 36 Techs, 18 Generals, 5 Advanced and ten Extras.

From this data, he deduces, "If this is an average sampling of deceased members, expired members and club licenses, there are roughly 90,000 fewer licensees than shown in the data nationwide. I have no clue of the error rate involved with my data. Your results may vary." My guess is that his Zip Code is probably pretty typical, and that his analysis is essentially correct.

There's also the question of activity. It's my guess that nearly half of all licensees are inactive, and that if we could figure out a way to activate those hams, then we'd really be able to say that our hobby is not dying. It's something worth thinking about, but there's certainly no easy answer to this problem. As Yogi Berra is purported to have said, "If people don't want to come out to the ball park, there's nothing you can do to stop them."

Overall, though, I think the numbers are headed in the right direction. Ham radio is **not** dying. Let's all keep up the good work.

Can a VE Session Be More Than Handling the Paperwork?

-- Patrick Tice, WA0TDA, Handiham Manager

Today I had a different, but VE-related, question from one of our blind members. She was asking how she might participate in a VE session if she became a volunteer examiner. She mused that being a VE sounded interesting and that she would like to participate, but she wondered if it would be practical since she couldn't see a room full of test takers. Since this topic comes up from time to time, I thought I'd take another look at what a VE session is about. While I am by no means an "expert" VE by experience, I can relate to testing in general - I was trained as a teacher, and I have observed people with disabilities for decades. I have been present at many VE sessions over the years, especially at Handiham radio camps, but have only relatively recently become a VE myself.

I got to thinking about the very best VE sessions I had observed. What made them stand out from the others? It was more than the success of the candidates, though that always helps. It was more than the team arriving prepared and being able to process the paperwork efficiently, too. It was more than promoting the session and arranging a good location, though those things were important.

But what was it?

Well, let's discuss the typical VE session a bit. Our blind Handiham member is right in assuming that a blind VE cannot observe a room full of test takers as a sighted person might do during a VE session. That does not mean that a blind VE cannot participate. At our radio camp VE sessions, I suggest that blind VE team members sit at the tables where the exam

Repeaters: 145.230 (-) CTCSS 88.5

is being read by volunteer readers to blind test takers. This assures that the exam is being proctored so that all rules are followed. A sighted VE simply looking at a room of test takers cannot know what is being said at each table in this kind of an adapted test session. Blind VE team members understand how tests are given to blind candidates and are potentially better at this kind of observation than anyone else.

The paperwork table is probably one place a blind VE would not be as useful. In every VE session, the team leader should try to match skills and capabilities with the tasks at hand. If there are no blind test takers to proctor, a blind VE might instead be part of the meet and greet team, setting candidates at their ease and answering the usual questions about what to expect during the testing, any rules of conduct (no smoking, quiet please, bring test to table at the side of the room when finished, etc.). As testing progresses and candidates start to turn their exams in for grading, a blind VE can then be stationed outside the testing room to answer questions that candidates might have. Typical information requested ranges from when they can use their new privileges if they pass an element upgrade to the location of the rest rooms.

Another job that every VE team has is communicating test results to the waiting candidates. There is no reason a blind VE cannot help with this job - and a savvy VE team leader will know who is best-suited for the hardest job - the delivery of the bad news. If a blind VE can handle telling a candidate that they didn't pass but can do so in such a way as to help that person accept the news in a positive way, the entire VE team will be grateful! You don't have to see to help candidates, successful or not, learn more about your ham radio club. Post-testing is a great time to talk with candidates and invite them to club and ARRL membership, and yes, even Handiham membership if they have a disability.

For the excited new Technicians and Generals, you might start a conversation about which radios are best, pointing out the availability of the club's repeater system or the best ways to check out the HF bands during the improving sunspot cycle.

In the end, a successful VE session is one that provides an opportunity for the candidates not only to pass their exams, but to leave the test site with the information and enthusiasm that will carry over to participation in the club and regional activities as well as getting on the air! When you look at a VE session as more than just three team members overseeing a room of test takers, you can easily find places for blind VE team members to be a part of this most rewarding of volunteer activities.

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 2011, we have already been tasked with several events, and more are expected. Feel free to contact Tom Bertolino, KB1P, at 781.608.6186 or <**kb1p@arrl.net**>.

- MS Walk 10 April (Boston/Cambridge)
- BAA 5K/1 mile 17 April (Boston)
- MS Journey of Hope 4 May (Natick)
- Run of the Charles 30 April (Charles River = Needham to Boston)
- BAA Half Marathon 9 October (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.

Own a Piece of History -- Bob Salow, WA1IDA

Digging through my basement I unearthed one of the first popular 2-meter handheld radios – complete with charger and extra crystals. It is a Standard C146A – last known to be in operation, but I'm sure the battery is deadddd. Copies of the Operating and Service Manuals (complete with all schematics) are there, too.

If this is something you would like to remind you of days gone by, make me an offer. Contact me at <walida@arrl.net>.

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.

Jim Cunningham N1VRM

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 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**.

BARC Volunteer Exam Sessions

The Boston Amateur Radio Club holds monthly VE sessions on the second Monday of each month. *The July, August and October exams are omitted.* Sessions are held at 7:00 pm at Brookline Police Headquarters, 350 Washington St in the Community Room across from information desk. A map is shown below

WORLDWIDE

We give all exams (Technician, General, and Extra). Testing is by reservation only. Please bring the following with you:

- Your current license and a photocopy for the ARRL, if you are upgrading
- Any 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.

For further information, contact:

Jim Clogher, N1ICN, 617.364.4658 n1icn@arrl.net Tom Bertolino, KB1P, 781.395.5538 kb1p@arrl.net

Business Can Advertise Here

The SPARC accepts commercial advertisements. BARC encourages monthly promotion of your products and services which would be of interest to hundreds of our members and others interested in the Amateur Radio Service.

The rates for display advertising are:

1 col x 2 in. (business card)	\$15 per issue
1 col x 2 in. (business card)	\$75 per 6 consecutive months
1 col x 2 in. (business card)	\$125 per 12 consecutive months
1 col x 4 in. (1/2 column)	\$30 per issue
1 col x 9.5 in. (full column)	\$60 per issue

Originals of ads must be presented to the Editor in MS Word or .jpg format to print 1:1. Other composition will be at extra cost. We will be glad to quote other ad sizes and durations.

Members are urged to seek prospective advertisers who are appropriate to our readers.

For additional information, contact Tom Bertolino, KB1P, at 781.608.6186 or <**kb1p@arrl.net**>; or Bob Salow at <**wa1ida@arrl.net**> or 508.650.9440.



DISTRIBUTION

Salem, NH 03079 (603) 898-3750 • 800-444-0047

- Ste. D12

224 N. Broadway

(603) 898-1041 Fax

ANAHEIM, CA • ATLANTA, GA • BURBANK, CA • DENVER, CO NEW CASTLE, DE • OAKLAND, CA • PHOENIX, AZ • PORTLAND, OR

SALEM, NH · SAN DIEGO, CA · SUNNYVALE, CA · WOODBRIDGE, VA

BARC Officers and Staff

President: Tom Bertolino, KB1P; 781.608.6186; kb1p@arrl.net		
Vice President: Linda Blair, NA1I 617.500.4406; na1i@arrl.net		
Secretary: Jim Bradley, KB1JKJ; 978.663.7114; kb1jkj@arrl.net		
Treasurer: Jim Clogher, N1ICN, 617.364.4658; n1icn@arrl.net		
Volunteer Exams: Jim Clogher, N1ICN, 617.364.4658; n1icn@arrl.net Tom Bertolino, KB1P; 781.608.6186; kb1p@arrl.net		
781.608.6186; kb1p@arrl.net Membership Services: Linda Blair, NA1I 617.500.4406; na1i@arrl.net		
Public Service: Tom Bertolino, KB1P; 781.608.6186; kb1p@arrl.net		
Newsletter Editor: Jim Bradley, KB1JKJ 978.663.7114; kb1jkj@arrl.net		
Programs & Activities: Phil Temples, K9HI;		

617.744.9780; phil@temples.com

I See the Future

20 Jan	BARC General Meeting	
14 Feb	BARC VE Session (by reservation)	
17 Feb	BARC General Meeting	
19 Feb	AARC Flea (Marlboro)	
26 Feb	HAM-CON (Colchester VT)	
3 Mar	BARC Business Meeting	
5 Mar	MtTARA Flea (Feeding Hills)	
14 Mar	BARC VE Session (by reservation)	
17 Mar	BARC General Meeting	
3 Apr	FARA Flea (Framingham)	
10 Apr	MS Boston Walk (Rp)	
11 Apr	BARC VE Session (by reservation)	
17 Apr	BAA 5K/1 Mile Races (Rp)	
17 Apr	MIT Flea (Cambridge)	
21 Apr	BARC General Meeting	
29-30 Apr	Near-Fest (Deerfield NH)	
20-22 May	Dayton Hamvention (Trotwood OH)	
	(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. Of course, if you know of an		

event that would be of interest to the readers, please let the

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.

Editor know.

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 2011, 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.



Direction to the Brookline Police Headquarters,



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

ARRL in Action: New Amateur Radio Bill Introduced in Congress

http://www.arrl.org/arrlletter/?issue=2011-01-13 The Amateur Radio Emergency Communications Enhancement Act. which died at the end of the 111th Congress, has been reintroduced in the 112th Congress as HR 81. The sponsor is Representative Sheila Jackson Lee (D-TX-18). The new bill -- which was introduced on January 5 -- has been referred to the House Committee on Energy and Commerce. "We are hopeful that this early start will lead to success in the new Congress," commented ARRL Chief Executive Officer David Sumner, K1ZZ.

Rep Jackson Lee first introduced the bill -- HR 2160 -- in the 111th Congress in April 2009. It gained an additional 41 cosponsors but did not progress out of the committee of jurisdiction. A similar bill introduced in the Senate -- S 1755 -made it all the way through that body in December 2009, but likewise was not taken up by the House. The objective of the bill -- which is supported by the ARRL -- is for the Secretary of Homeland Security to study the uses and capabilities of Amateur Radio communications in emergencies and disaster relief and to identify and make recommendations regarding impediments Amateur Radio to communications, such as the effects of private land use regulations on residential antenna installations

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		

Contest Operating Tip

In phone contests, including Field Day - remember to breathe! Before giving your exchange, inhale so that you can say it all smoothly without interruption. Leave out the unnecessary and time-consuming phrases (like, "please copy" and "you are") and give out the information in the same order every time. A regular breathing rhythm actually has a calming effect, helps minimize confusion, and fights off the dreaded, "Uh…" panic attacks. Sound calm, cool, and collected like a veteran! And don't forget to give your call in the exchange as required.

Cardiopulmonary Resuscitation (CPR) can help someone survive a cardiac arrest. With CPR you can start a person's heart again and keep them breathing if the heart has stopped beating. To be fully effective, the bystander should have observed the arrest and action started immediately.

New guidelines from the American Heart Association for hands-only (compression-only) cardiopulmonary resuscitation indicate an improvement in recovery over hesitation because of breath contact. Doing CPR is tiring, but it's best to keep on until the emergency services arrive. If there are other people around who can help, you can take turns doing CPR.

The principles of CPR are:

- Pressing down on the person's chest to make blood leave their heart.
- Breathing into the mouth to give them oxygen. However, if you don't want to breathe into someone's mouth, it's better to just press on the chest than do nothing at all.

The idea is to manually help someone's heart and lungs work until medical help arrives. CPR won't usually get someone's heart beating again. That's why you need to keep going until the emergency services arrive.

CPR needs to be done correctly to work. It's best to go to a class to learn how to do basic life support, and to practice. The key steps are below.

Gently shake the person's shoulders and ask them loudly if they are all right. If there is no response:

- Shout for help and dial 911 for an ambulance, or get someone else to do it.
- Turn the person on to their back and make sure that air can get down their windpipe by:
- Placing one hand under the back of the neck, and the other hand on the forehead. Tilt the head back.
- Using your fingertips, lift the chin.
- If you don't think you can do mouth-to-mouth properly, go straight to doing chest compressions. Otherwise, if the person is not breathing and not responding, give them two "rescue breaths" by holding the nose closed and use **mouth-to-mouth resuscitation**.

Don't waste time trying to find a pulse, as it can be hard to be sure whether you can feel one.

- Kneel by the person's side
- With one of your hands, place the heel in the center of the chest
- Place the heel of your other hand on top of the first hand and interlock the fingers of your hands
- Position your upper body directly above the person's chest and, with your arms straight, press down on the breastbone (sternum) 1 1/2 to 2 inches. This may take some force.

This is called **chest compression**. Don't press on the ribs, the bottom end of the breastbone or the stomach. After each compression, release all the pressure on the person's chest, without taking your hands off the breastbone. You should do about two compressions a second, or about **100 every minute**. The compression and the release should take the same amount of time. If you can keep the CPR going, you are more likely to save the person's life.

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 Tom Bertolino, KB1P, at **<kb1p@arrl.net**>.