



The Minuteman Repeater Association

The Minuteman

Volume 32, Number 4

March 2003



President's Corner by Kevin Paetzold, K1KWP

Marlborough 147.270 repeater acquired: At the Feb 19 board meeting it was voted to acquire the 147.270 repeater in Marlboro. This repeater was a tenant in the MMRA shelter at Slygo, next to the 449.925 repeater. The 147.270 repeater was previously operated and maintained by the "Marlborough Repeater Association". It will now be operated and maintained by us (i.e. the "Minuteman Repeater Association"). The 147.270 repeater has the ability to link to the W1OJ 10M repeater. This purchase would not have been possible without a lot of effort from W1BRI and WA1NLR.

I believe one of the factors precipitating this transaction was the repeater's antenna situation. Its antenna is at the very top of the Slygo water tower and there were structural issues with the antenna supports. I was concerned about the MMRA taking responsibility for this situation because it was clear that this would need to be fixed before something really bad happened. In addition, I was concerned about the potential expense to the MMRA to fix this situation. Fortunately WA1NLR came to our rescue and he was able to arrange for a volunteer donation from local professional tower climbers. This is an incredible gift to the MMRA and all the future users of the 147.270 repeater. I hope that all of you will also thank Bill and these climbers for this gift. Several board members, including myself, would probably have opposed this transaction if repairing the antenna was not possible. One piece of unfinished business will be some token of our gratitude to the climbers who did the work.

Some changes to the 147.270 repeater are apparent. The immediate plan is to keep the repeater in operation much as it was. The callsign has been changed to W1MRA. The former 107.2Hz PL card is now set for 146.2Hz, the same as all other MMRA 2M repeaters. 100Hz PL is still also available at this time. Plans for this repeater remain to be determined and I am sure will be the subject of discussion at future meetings. One proposal is that we add the ability for this repeater to link to 449.925 and the rest of the MMRA network. Another is a link to Echolink and/or IRLP. User codes to enable these links would be made available to members just as the codes for linking the other repeaters are made available to members.

Some individuals have expressed an interest in making a special donation to support or further develop the capabilities of this repeater. We certainly encourage those who are interested in donating to do so!

I would also like to thank K1IW and W1BRI for taking on the additional work to checkout and fully understand the operation of this repeater and for doing the work to integrate it into the MMRA repeater family.

Expenses, membership and meeting place search: As you will see elsewhere in the newsletter membership in the MMRA continues to slowly decline. The numbers for this year are actually worse than they seem because this was a Boxboro convention year and we usually have much better renewal rates because of Boxboro. Please encourage all your contacts who make regular use of the MMRA repeaters to support the repeaters through their membership.

Our newsletter editor, N1BE, has been able to significantly reduce our newsletter printing costs. Combined with telephone and insurance cost reductions in previous years, this has helped to offset the membership loss. The remaining big expense is the cost of our meeting space at the Campion Center in Weston. If you have any suggestions, ideas, or leads on another suitable meeting place that is centrally located please let us know (mmra@mmra.org). Meetings at Campion are costing us \$150 each.

Elections: The MMRA has a general membership meeting on Wednesday March 19 at 7:30 PM at the Campion center (directions on the web page). The MMRA also will have a board meeting on Wednesday April 16 at 7PM in Maynard MA. The last meeting of the year will be the general membership meeting on Wednesday May 21 at 7:30 PM at the Campion center where elections for officers and directors will be held.

Please seriously consider making yourself available to take your turn serving as an officer of the MMRA. Attend any of these meetings, especially the board meeting, to learn more.

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About the Minuteman Repeater Association

The Minuteman Repeater Association (MMRA) is dedicated to Amateur Radio and public service. The MMRA has built a large system of repeaters in Eastern Massachusetts.

The MMRA meets on the 3rd Wednesday of September, November, January, March, and May. Meetings start at 7:30 PM in the Campion Center in Weston MA. Meetings are open to all interested parties. Talk-in is available on the Weston 2-meter repeater (146.82).

The Minuteman newsletter is mailed one week before each meeting. Members are encouraged to submit articles. Articles may be sent to the editor via email to n1be@arrl.net. The deadline for articles is the last Friday of the month preceding the meeting.

Each Tuesday evening at 8PM the MMRA links all the repeaters for an open net. The topic is "Technical Information and Other Stuff". Feel free to join us.

Membership in the MMRA is open to all radio amateurs. Annual dues are \$25 per individual or \$35 per family. The membership year starts on Sept 1st. Dues for new members are prorated for the remainder of the year. See our web-site for details.

Email to the club leadership should be sent to mmra@mmra.org. The MMRA web site is: <http://www.mmra.org/>

An email distribution list for club members has been established on: <http://www.yahoogroups.com/> — the name of the group is "MMRA".

Repeater and Frequency Information

Location	MHz	PL	Call	Note
Marlboro	53.810	71.9	W1BRI	PTL
Marlboro	146.610	146.2	N1BHI	FTL
Quincy	146.670	146.2	W1BRI	PTL
Stoneham	146.715	146.2	N1NVL	PTL
Weston	146.820	146.2	WZ0C	PTL
Marlboro	147.270	146.2	W1MRA	PTL (to 10 Meters)
Hopkinton	223.940	103.5	N1BHI	FTL
Quincy	224.400	103.5	N1KUG	FTL
Weston	224.700	103.5	N1HBR	FTL
Stoneham	446.725	88.5	N1NVK	NA
Brookline	447.875	88.5	K1IW	Affiliated, PTL
Shrewsbury	449.575	88.5	W1BRI	FTL
Marlboro	449.925	88.5	W1MRA	Network Hub
Marlboro	144.390	none	N1QPR-2	APRS Digipeater
Marlboro	145.030	none	W1MRA-3	KA-node Digipeater
?	145.630	146.2	W1MRA	Fox Box

Notes: FTL = Full Time Linked to the Hub.
PTL = Part Time Linked (on demand).
NA = linking is Not Available.

PL: PL is now required on 2 meters to prevent interference.
The code **750** will temporarily disable the PL requirement.

Using the Autopatch: Only the hub has a telephone line.
(1) Link to the hub if necessary.
(2) Then bring up the patch using the 449.925 autopatch codes.

Control codes are sent to members upon receipt of dues.

MMRA Leaders

President	Kevin Paetzold	K1KWP
Vice President	Bob Evans	N1BE
Secretary	Bob DeMattia	K1IW
Treasurer	Bill Northup	N1QPR
Clerk	Jon Titus	KZ1G
Technical Officer	Bryan Cerqua	W1BRI
Director	Larry Banks	W1DYJ

Director	Shelley Northup	N1VJE
Director	Steve Schwarm	W3EVE
Director	Bill Thorpe	WA1NLR
Emergency Coordinator	Bill Northup	N1QPR
Public Service Coordinator	Kevin Paetzold	K1KWP
Newsletter Editor	Bob Evans	N1BE
VEC Liaison	Bill Wade	K1IJ
Webmaster	Michael Ford	WZ0C

Secretary's Report by Bob DeMattia, K1IW

Minuteman Repeater Association membership stands at 161 active memberships. Of this, 34 are family members and 7 are life members. We have one member who has paid through 2004!

For the 2002 "renewal season", we added 17 new members, but 36 people did not renew (we are still getting a few renewals, so there's still some improvement expected). One can compare this to 2001, when we added 30 new members, but lost 39.

MMRA depends on dues to keep its repeaters running. If you know someone who benefits from our repeaters, but is not a member, ask them to join! No other club in the Boston area offers twelve repeaters, autopatch, and linking capability for so little!

Does anyone know what happened to **Bill Frizell**, W1LHV, MMRA life member # 250? His newsletters are returned by the post office with no forwarding address. I am using his callbook address. I've done a bunch of phone number and name searches on the internet, but could not find better information. If you can help in the search, please contact me!

You can now review and update your MMRA membership information via the Internet. Go to this special URL:

<http://members.mmra.org/>

for further instructions. Each member's data is password protected.

If you do not wish to have this information available over the web, send an e-mail to k1iw@amateur-radio.net and access to your data will be disabled.

Feb 19 Board Meeting Minutes by Bob DeMattia, K1IW

The meeting began at 7:05 PM. Attendees were Kevin Paetzold, K1KWP, Mike Goldberg, K1LJN, Scotti Fuller, N1PUI, Bob Evans, N1BE, Larry Banks, W1DYJ, Bryan Cerqua, W1BRI, Bill Thorpe, WA1NLR, Bob DeMattia, K1IW, Steve Schwarm, W3EVE, Shelley Northup, N1VJE and Bill Northup, N1QPR.

Bob Evans moved that MMRA purchase the Marlboro Repeater Association's 2m repeater (147.27) for \$200. Kevin Paetzold seconded. Proposal was unanimously approved.

Bryan Cerqua reported that the 147.270 repeater antenna had been fixed earlier that day.

Bob DeMattia reported club membership status. The MMRA lost 36 members this year, and gained 17 for a net loss of 19.

Bill Northup reported club treasury is approximately \$6000. Although revenue is declining, the MMRA board has been taking steps to minimize expenses. Bob Evans was able to reduce the cost of newsletter production from \$200 to \$95 by changing to a different printer. The MMRA is looking for a new place to hold it's meetings. Meeting space at the Campion Center costs \$750/year and is one of the last remaining major expenses for the club.

As compensation for equipment purchased for MMRA, the board approved a proposal to extend the membership of N1BHI through August 31, 2005.

Steve Schwarm requested the use of MMRA repeaters for the Boston Marathon. The request was accepted. The exact repeaters to be used are still to be determined.

Bob DeMattia requested the use of the MMRA 146.82, 146.715 and 224.70 repeaters for The Walk for Hunger on May 4th. The board approved this request.

The board voted to institute a policy that all future non-monetary donations to the MMRA (for example in lieu of dues) must be approved by the board.

Mike Goldberg, ARRL OOC for Eastern Massachusetts, made a presentation to the board about the ARRL official observer program. Topics covered included purpose of the Amateur Service, purpose of the Amateur Auxiliary, and how they interact. He also covered requirements needed to be an OO, formation of Local Interference Committees, and some anecdotes about his experience as an OO. More information on this program can be found at:

<http://www.arrl.org/FandES/field/org/oo.html>

The meeting adjourned at 9:05 PM

Antenna System for Sale by Bob Snyder, KB1K

For Sale:

- HyGain Explorer 14 (4el for 10-15-20-40), all stainless steel
- 17 Meter rotating dipole
- 2 Meter Ringo Ranger
- HyGain TailTwister Rotor System
- Hazer H-4
- Rohn 25G 10' section plus 9' top section and 10' mast

This all sits on the garage roof with a house bracket. The Hazer cranks the beam up and down.

The antennas are located at: 28 Colburn Drive, Sharon, MA, 3 miles from I-95 Exit 8.

To inquire, call 508-698-0097 or email kb1k@att.net

Repeater Report by Bryan Cerqua, W1BRI

Acquiring 147.27: The MMRA is the new owner of the Marlboro 147.270 repeater. On February 9th Wayne, N1XXI, and I visited Rick Plummer's, KV1W, QTH in Berlin to purchase the repeater and go over all the paper work. Included with this deal are the backup battery, duplexer and antennas. *[Bryan personally purchased this repeater and owned it until the MMRA board meeting. — Ed.]*

I received documentation consisting of four manuals. We did more talking about ham radio in general than about the repeater, however I asked a few important questions. That evening I started going through the manual and quickly realized the good deal we got. The controller is an ACC RC850 controller with all kinds of features, voice synthesizer, clock and many telemetry inputs that can be spoken out in voice as various meter faces; this feature could be used to monitor the battery voltages and temperature at the site. The repeater is a Motorola Micor repeater with two MASTR II mobile radios, one for a control receiver and the other for the link to the 10M W1OJ 29.62 MHz repeater.

The Antenna: The 147.27 repeater antenna is mounted atop the Slygo hill water tower. The top mounting bracket had come loose and for some time the antenna had been flip-flopping in the wind. It was leaning over almost horizontal. Getting this antenna fixed was a major concern. Thanks to the support of Bill, WA1NLR, two licensed climbers installed an awesome heavy-duty mount to fix this antenna.



Bill's son Bud, KB1DPZ, used his 600mm telephoto Nikon digital camera to take high quality photos of the broken antenna mount. The photos were so good it was like being on top of the tank, the closest I'll ever get. We had wait for the weather to break for this antenna party. The weather was most unpleasant over the next few weeks, snow every other day, too cold, etc.

After the big snowstorm on a sunny but cold Wednesday, Bill, the two climbers and I met to do the work at Slygo. I got to the site a little early to shovel a path to the shelter. The snow was more than two feet deep. Thanks to Kevin, K1KWP, for showing up and letting me borrow a better shovel than my wimpy plastic one. After about an hour I finally made it to the shelter and shut down the repeater.

Using my MFJ antenna analyzer I checked out the antenna and it looked fine. This was a very good thing since we had only planned to remount the antenna and had not planned to replace it or the feedline.

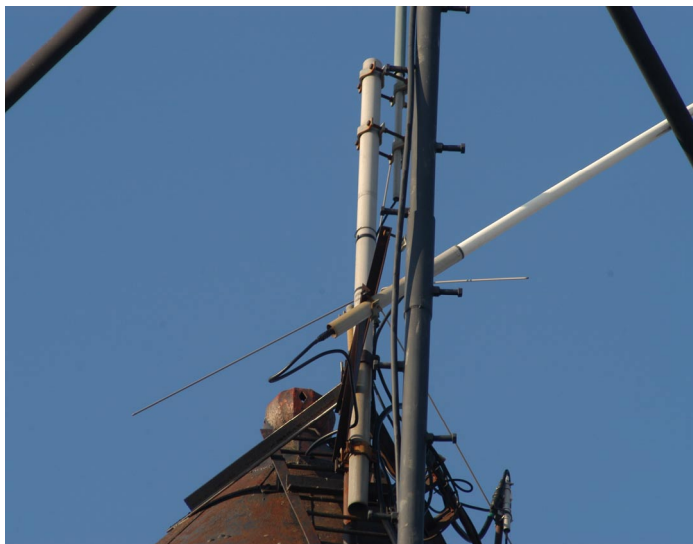
The mount and saddle brackets were assembled, then the two climbers went up the tank like a couple of monkeys trailing a big rope. They used the rope to hoist up the mount while Bill and I tagged it off from below. It was real tough to pull this mount up, the men had to take a breather once in a while. Once the climbers had the mount on the top of the tank I could grab my camera and take photos.

After about 2 hours the job was complete and the climbers descended with the antenna looking better than ever. The repeater was turned on and the shelter locked up. On the way back to work, Bill and I tested the repeater and instantly noticed the improved performance. Many other users have tested the repeater and the coverage is great.



RC 850 Controller: The next task was to change the repeater callsign from WA1AQI to W1MRA. The RC 850 has a modem for control but the phone line was disconnected before the deal went through. We planned to connect this modem to the 449.925 phone line to reprogram the controller remotely.

(Continued on page 5)



Repeater Report (cont.)

(Continued from page 4)

Bob, K1IW, came up with the idea of using a relay controlled by a logic output from the controller to switch the phone line between 147.27 and 449.925. While Bob built the switch box complete with LEDs I created a few macros for the 7K controller on 449.925 to control the relay.

Later that week on another very cold night Bob and I met at Slygo to install the phone line switch box. We needed the quartz heater I brought! Bob mounted the switch box and hooked up the phone line. I wired it to the 7K interface box that Walter, N1HBR, built many years ago. The terminal strips on the interface box made the hookup easy. The macros and the phone line switch box worked perfectly the first time.

While there we decided to change one of the PL boards to 146.2. The PL board came loose from its double sticky tape and the dip switch was all gunked up making it very difficult to control. It started to get flaky and Bob had already ordered the pizza to be picked up and we were getting cold. So we removed the PL board and headed to Bob's QTH for reprogramming the callsign.

We ate a few pieces of lukewarm pizza and went to Bob's radio room to connect to the RC 850 controller. After trying a few terminal emulation programs Bob got the proper response back from the controller. In no time he changed all ten or so callsign entries from W1AQI to W1MRA. Also changed were some of the link commands and prefixes. It was a very productive evening. While I drove home, around 11:30PM, Bob and I chatted on the repeater hearing all the new IDs.

The following week I looked at the PL board and discovered that it had been modified by adding a small jumper and drilling out some etch to make both open collector transistors behave the same. One output is used to control a reed relay that gates the PL on the repeater output while the other output provides an active low to the RC 850 controller. This board has been re-installed for the 146.2 Hz PL encode/decode.

53.81: The 6M power amplifier has kept me busy for some time. After borrowing a high split tube amp from Kurt, W1OBQ, I noticed the low pass filter coils had different numbers of turns. I modified the MMRA amp to match, removing a few turns from two of the coils and winding two new coils from coat hanger wire.

I went back up to the site for the nth time and fired it up. To my disappointment the output power was only a little over 100 watts and dropped to about 80W after a short period of time. Something was heating up so I gave Kurt's amp a try.

Earlier I had fixed the high voltage feed through since the porcelain insulator had cracked. I hit PTT and heard a big bang. The lights dimmed almost all the way out. I knew instantly that the high voltage feed through had arced over. I removed it and temporally ran the high voltage directly into the PA compartment and fired it back up again. Fiddling with the tuning knobs, the amp just barely would tune up on 53.81. It kept cutting out and was not going to cooperate. I took both amps home for more investigative work. This left the repeater running off the pre-driver at about 20W out for a few weeks.

In the MMRA amp my low pass filter coils made from coat hanger had completely fried. One of the coils actually broke loose. (See the photo on the next page.)

Now I realized that using coat hanger to make the coils was wrong. Every one I talked to said that's steel you idiot. I needed some #12 silver plated wire to redo all the coils. I looked on the web and called some local places without luck. Finally I called Davis RF and they had exactly what I needed at 17 cents per foot. I ordered 50 feet. After shoveling out from another snowstorm I found the box of wire in a plastic bag buried in the snow in front of my garage door.

To simulate the low pass filter circuit on my CAD station at work I needed to find out how much inductance the coils should be. I found a neat program on the web that calculates the inductance based on the coil geometry. Now I knew exactly what the coils should be based on the simulation results. I wound all four coils on one piece of wire to make it more reliable. The original design used four individual coils and terminal lugs and screws in insulating posts. I slid the lugs down the wire as I wound each coil. To help with the placement of the coils and lugs, I took a photograph of the original tube amp low pass filter section, scaled it to actual size and used it as a template to help form the coil assembly. To get the correct diameter I used two different sized sockets to wind the coils on.

I went back to the site with the again modified amp for another shot. The amp mounts in the cabinet quickly with only four screws and few cables. An inline Bird meter has replaced the original directional coupler. The meter movement is mounted to the side of the cabinet.

The fun starts by tuning the amp and praying for good results. At first I didn't think it was going to work since the power out was only about 60 watts. I realized I had turned down the screen drive all the way. I cranked it up some and immediately the power was over 150W. Dipping the plate current and adjusting the drive level, I could easily pin the Bird meter at over 250W. *[Bryan is young enough to have missed tubes while getting his EE degree. — Ed.]*

I was getting excited, for the first time in many years I was able to get the rated power out of this amp. I set it to 250 watts even though I could get more. Without having a 500W wattmeter slug I didn't feel comfortable setting it higher. The same night Bob and I went to Slygo to install the phone line switch box, I first visited the 53.81 transmit site to check the power. I was happy to see that it was sitting at a little over 250W after about 1 month of usage. I left it alone and went over to the Slygo site to meet up with Bob.

The PD83 antenna works well. At this power level, the reflected power is about 5W. Others like me that live in the fringe areas can hear 53.81 much better now. Let's hope it stays that way, only time will tell.

Until next time, I hope to talk to you all on one of the many MMRA repeaters. Six meters is still my favorite.

ARES Appointments by Mike Neilsen, W1MPN, EMA SEC

Steven Telsey, N1BDA, New Middlesex DEC

It is my distinct pleasure to announce the appointment of Steven Telsey, N1BDA to the position of District Emergency Coordinator (DEC) of the Middlesex District of the Eastern Massachusetts Section. The Middlesex District comprises most of Middlesex County, except those portions inside of Rt. 128 (I-95) that are part of the Metro Boston District. The Middlesex District contains RACES Sectors 1B, 1C, and 1D. Steve also accepted an appointment as EC to Concord, MA.

Steve is a very talented individual and enthusiastic Ham Radio Operator. Steve has completed all three ARRL Emergency Communication Courses, and he is also both Emergency Communication Certification Instructor and Examiner, for those course offerings. Steve has notable credentials as an ARES member, participating in ARES exercises and public service events, as well as an active SKYWARN observer and net controller. He is the Concord RACES officer, and has been instrumental in setting up the EOC and equipping it. Steve is a member of three important regional clubs, and contributed to each of the clubs' emergency communication programs. N1BDA has other notable accomplishments that are

highlighted by pressing the link with his name to the left under "ARES Leadership Staff", on the EMa ARES website, <http://ares.ema.arrl.org/>

Please join me in welcoming Steve to the ARES Leadership.

Bill Northup, N1QPR, New EC Appointment

I am pleased to announce the appointment of Bill Northup, N1QPR, as an ARES Emergency Coordinator (EC). Bill will provide direct liaison between ARES and the Minute Man Repeater Association (MMRA), which provides significant support to the RACES and ARES programs. As most of you know, the MMRA provides significant repeater coverage to north and central EMa when their system is linked.

Please join me in welcoming Bill to the ARES Leadership.

[In this way the MMRA will get more involved with ARES planning. — N1QPR]

[N1QPR, the MMRA "EC" appointed by the MMRA board has now been appointed to be an official ARES EC. The MMRA congratulates Steve Telsey, N1BDA, and Bill Northup, N1QPR on their recent appointments to ARES positions! — Ed.]

Please Assist your DEC by Steve Telsey, N1BDA

I need your help. I've just assumed the post of DEC (District Emergency Coordinator) for Middlesex County west of route 128. On the one hand, "all" I need to do is manage the ECs from each community. On the other hand, the devil's in the details and the details have me stumped. Most towns don't have an EC and I'm not sure I know what all the goals are.

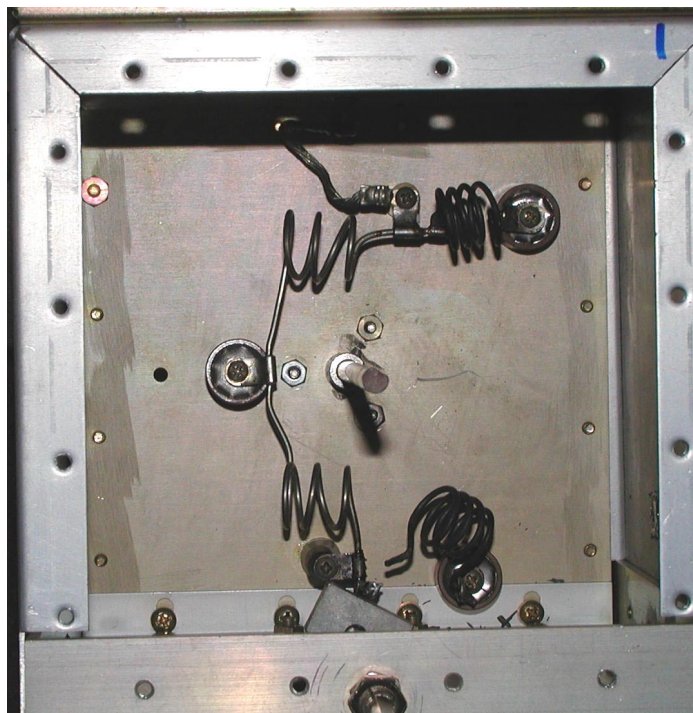
That said, I do have a few initial goals. The first is to establish and maintain a dialogue with all hams interested in emergency communications. That means ARES and RACES folks as well as the unaffiliated. I want to develop a group of trained hams in the district. More than that, I want them to have some practical experience via SETs and public service events.

Another goal is to help establish and support strong local groups with ECs (official or otherwise) in each community who are responsible for developing call up lists and procedures, setting up training, etc. Periodic meetings and joint exercises are on the agenda so we learn who our colleagues are.

My final and most important goal is to listen and find out what you are looking for in a DEC. What issues or items do you want your DEC to start/stop/continue doing? Drop me a line and let me know.

The best way to reach me is via email to n1bda@arrl.net. I'd appreciate it if you began the subject line with ARES. I will try to acknowledge mail with a day or two. Answers may take longer.

Many thanks. I look forward to working with all of you to revitalize ARES and emergency communications preparedness in Middlesex County.



To the left, burned coils in the low pass filter of the 53.81 MHz PA.

Public Service Volunteer Opportunities in the New England Division

Listing public events at which Amateur Radio communications is providing a public service and for which additional volunteers from the Amateur Community are needed and welcome. Please contact the person listed to identify how you may serve and what equipment you may need to bring.

The most up-to-date copy of this list is maintained as <http://purl.org/hamradio/publicservice/nediv>

Every event listed is looking for communications volunteers.

Date	Location	Event	Contact	Tel/Email
Apr 21	Hopkinton	MA Boston Marathon (start)	Steve K1ST	508-435-K1ST k1st@arrl.net
Apr 21	Hopkinton	MA Boston Marathon (course)	Steve W3EVE	508-384-7697 w3eve@arrl.net
Apr 21	Hopkinton	MA Boston Marathon (finish)	Paul W1SEX	978-632-9432 w1sex@arrl.net
Apr 27	Boston	MA Run of the Charles	Ed N1VSJ	978-952-6474 mooseeb@aol.com
Apr 27	Groton	MA Groton Road Race	Ralph KD1SM	978-582-7351 kd1sm@arrl.net

This list is published periodically as demand warrants by Stan, KD1LE, and Ralph, KD1SM. Our usual distribution is via packet to NEBBS, via Internet mail to the arrl-nediv-list and ema-arrl distribution lists, and on the World Wide Web (see URL above). If other mailing list owners wish us to distribute via their lists we will be happy to oblige. Permission is herewith granted to republish this list in its entirety provided credit is given to the authors and the URL below is included. Send comments, corrections, and updates to:

(via packet) KD1SM@K1UGM.#EMA.MA.USA

(via Internet) KD1SM@ARRL.NET.

We make an attempt to confirm entries with the coordinator unless the information is from another published source. We very much appreciate the assistance we have been receiving from our 'scouts'; everyone is welcome to send us postings.

Walk for Hunger, Sunday May 4th by Bruce Pigott KC1US

Your skills are needed at the 35th Walk for Hunger! Using two meter equipment, we will be in key areas tying together over 1,500 volunteers with the Project Bread walk managers. Positions are available at different times during the day along the twenty mile route from Boston out to Newton and back.

We need coordinator shadows, van communicators, operators with walking marshals and at checkpoints. To join in on the fun, you can sign up on line at the Crocker Public Service Group web site, <http://cpsg.amateur-radio.net/>, send a message to W4H2003@amateur-radio.net or call me after 7:30PM at 781-275-3740.

Amateur Radio Communications at the Boston Marathon

Radio operators are making preparations to support the 107th running of the Boston Athletic Association Boston Marathon on April 21, 2002. Amateur Radio plays a vital part in supporting runners before, during, and after the marathon.

This year we have a combined organization handling all phases of radio support; start area, length of the course, and finish line. Positions are available starting early in the day in Hopkinton, along the route at aid and water stations, and at finish line operations in Boston. You can choose which activity you will be involved with, or work multiple locations. In Hopkinton, we will assist with coordinating the multiple parking areas and providing for start line safety. Along the 26 mile route, we assist the Red Cross at aid stations with supply requirements and ambulance dispatch. Runner pick up busses traveling the route will have hams on board. At the finish line we work with the medical teams and shadow officials.

You will need a two meter or dual band HT, extended antenna, and extra batteries for participation. Procedure sheets will be available before the event. We will try to accommodate your needs within the confines of the event set up.

To signup mail in the BAA volunteer form available at their web site, <http://www.baa.org>. You can find the volunteer form by clicking B.A.A Marathon under B.A.A. Volunteering then click GENERAL VOLUNTEER APPLICATION. Fill it out and mail it in as instructed. Check in the Race Day section: if you want to work the start check *radio team*; if you want to work the finish check *ham radio (finish only)*; and if you want to work the course check *ham radio (course only)*. We will be doing a mailing at the end of February with more details. You will be able to change your mind at that time as well. Or feel free to contact Steve Schwarm, W3EVE at 508-384-7697, w3eve@arrl.net. Please no calls after 9PM or before 8AM.

Next Meeting — Wednesday March 19, 2003 K1KWP & N1QPR: UIVIEW32 for APRS

MMRA members Bill Northup, N1QPR and Kevin Paetzold, K1KWP will give a presentation about and demonstration of UIVIEW32

UIVIEW32 is a new and very rich program suite for APRS that is rapidly gaining a lot of popularity in the US.

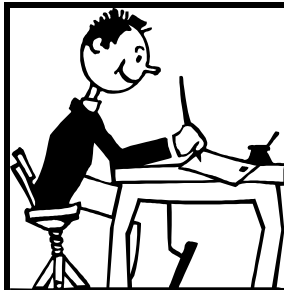
UIVIEW32 runs on Windows and it was originally developed in the UK. In addition to the great features of UIVIEW32, it has an open architecture that has allowed many others to add additional functionality that they have developed. The result is a lot of new fancy stuff that we can do with APRS. Because he finds

UIVIEW32 superior, K1KWP has already deleted WINAPRS completely off his computers.

Since there is widespread interest in APRS, the MMRA is extending an invitation to the larger local APRS community (not just MMRA members) to attend this meeting.

Calendar of Ham Radio Events

- Mar 9:** Mt. Tom ARA flea, Amherst MA (Flea market info from W1GSL list. <http://mit.edu/w1gsl/Public/ne-fleas>)
Mar 9: CVRC flea, Henniker NH
Mar 14-16: Framingham License Class
Mar 19: **MMRA meeting**
Mar 30: FARA flea, Framingham MA
Apr 16: **MMRA board meeting**
Apr 19: PAWA flea, S. Portland ME
Apr 20: Flea at MIT, Cambridge MA
Apr 25: **MMRA Newsletter Deadline**
May 2-3: Hosstraders flea, Hopkinton NH
May 21: **MMRA elections & meeting**
Jun 7: FARA flea, Falmouth MA



MMRA VE Sessions

3rd Saturday of each Month

9 AM at the Marlboro Public Library

Contact: Bill Wade, K1IJ

781-891-9079 Evenings 6 to 10 PM,

Weekends 8 AM to 10 PM.

Accredited by the ARRL VEC

THE MINUTEMAN REPEATER ASSOCIATION

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WE'RE ON THE WEB!
[HTTP://WWW.MMRA.ORG/](http://www.mmra.org/)
