

#### The Minuteman Repeater Association

A non-profit organization providing communications infrastructure and volunteers for community and emergency events.

# The Minuteman

Volume 44, Number 5

May 2015



Membership Meeting ~ Wednesday, May 20 ~ 7 PM

# Officers Report to Members and General Elections

This is our official annual membership meeting which will include the elections of officers for 2015-2016

(SEE PAGE 3 FOR THE SLATE OF OFFICERS.)

Location: The Campion Center, 319 Concord Road, Weston Talkin: 146.79

#### From Route 128 (I-95):

From Route 128 (I-95) in Waltham, take the Route 20 exit and head west to the town of Weston. At the first major intersection, turn RIGHT on to Boston Post Road. Drive straight through the town center. After the center, turn right on to Concord Road. Then see below.

#### From Route 20 heading East towards Weston:

Head East on Route 20. After entering Weston on Route 20 bear left onto Boston Post Road. From Boston Post Road turn left onto Concord Road.

The Campion Center is on Concord Road. However, before you get to it, there will be a fork on Concord Road where Concord road takes a turn to the left. You will find Campion a short distance after the fork. It will be a large building with a dome on your right.



Table of Contents					
Next Meeting	1,3	April Business Meeting	4	March Membership Meeting	6-8
MMRA Repeater Information	2	Public Service Report	5	MMRA Information	9
President's Corner	3	Boston Marathon	3,5	Fleas	10

#### **About the Minuteman Repeater Association**

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

The MMRA meets (usually) on the 3rd Wednesday of each month from September to June. Meeting times, locations, and talk-in frequency vary and are announced in this newsletter and on weekly nets. Meetings are open to all interested parties. Guest speakers and programs of general interest occur in September, November, January, March, and May. The intervening meetings are also open to all members and are for general business.

The Minuteman newsletter is Emailed one week before each general interest meeting. Members are encouraged to submit articles which can be sent to the editor at newsletter@mmra.org. The deadline for articles is the last Friday of the month preceding the meeting.

Each Tuesday evening at 8PM the MMRA links most of the repeaters for an open net. The topic is "Technical Information and Other Stuff". Join us!

Membership in the MMRA is open to all radio amateurs. Annual dues are \$25 per individual or \$35 per family. See our website for details.

Email to the club leadership should be sent to contact@mmra.org. The MMRA maintains a web site at: http://www.mmra.org/

An email distribution list for club members named "MMRA" is at: www.yahoogroups.com/.

You can also follow us on twitter @mmraham and like us on Facebook: https://www.facebook.com/mmraham.

#### MMRA QRM Policy

MMRA members and all other operators are strongly encouraged to report repeater activity that does not abide by Part 97 rules or accepted amateur radio practice to the board of directors at contact@mmra.org or via other means.

The most effective way (and probably the only effective way) to deal with an individual causing QRM is to NOT engage that individual on the air. Please include the time and

#### **Repeater and Frequency Information**

Band	and XMTR Freq		PL	Call	Linking To Hub 1 To Hub 2	
MMRA Vo			ice Repe	aters		
10m	Marlborough	29.680	131.8	W1MRA	PTL	PTL
6m	Marlborough	53.810	71.9	W1BRI	PTL	PTL
2m	Brookline	145.160	na	K1MRA	D-	Star
	Belmont	145.430		N1DDK	PTL	FTL: DARI
	Mendon	146.610		AE1C	FTL	PTL
	Quincy	146.670		W1BRI	PTL	PTL
	Burlington	146.715	146.2	KC1US	PTL	PTL
	Weston	146.790	146.2	N1BE	PTL	PTL
	Boston  Remote recei  Boston:	146.820 ve in Brook PLin = 127.		K1BOS	FTL	PTL
	Marlborough	147.270	146.2	W1MRA	PTL	PTL
1¼m	Hopkinton	223.940		KB1L0Y	PTL	FTL
	Quincy	224.400	103.5	N1KUG	PTL	FTL
	Weston	224.700		N1NOM	PTL	FTL
	Marlborough	224.880		W1MRA	PTL	FTL
70cm	Lowell	442.250		K1LVF	FTL	PTL: 446.775
Weston *		442.700	KG1H		k Hub 2 o Hub 1)	
	Burlington	446.775		W1DYJ	FTL	PTL
	Marlborough	448.225	na	W1MRA	D-	Star
	Marlborough	449.575		W1BRI	PTL	PTL
	Marlborough *	449.925	88.5	W1MRA	Networ	k Hub 1
33cm	Boston *	927.0625		K1RJZ	PTL	PTL
	Marlborough * PL out = 1		D244	W1MRA	PTL	PTL
Marlborough		144.390	none	W1MRA	APRS Di	gipeater
	??? 145.630		146.2	W1MRA	Fox	Вох
<del>*</del>	HUB1- 449.92	5: IRLP n	ode 4133 ,	/ Echolink	node 4133	3
Inte	HUB2 - 442.7 Connec	'00: IRLP no ted to 220		9124 on <sup>-</sup>	Tuesdays	
*Internet	927.0625: IRLP 4977  Normally linked to the NE900 Reflector, 9125. Linked to MMRA via IRLP for the TIAOS net. Normally linked				via IRLP	

Notes: FTL = Full Time Linked (or default state)

PTL = Part Time Linked (on schedule or demand)

#### President's Corner ~ Bob DeMattia, K1IW

MMRA Elections are being held at the next meeting on May 20th. Once again, the board received no nominations for officers, so the entire board is running unopposed. Assuming things go as they probably will, I'll be beginning my 12th term as MMRA president following the election.

When I was elected in 2004, we had about 185 members. Today, that number is north of 250. As a regional club, MMRA has some interesting challenges - the most prevalent of which is that local clubs tend to get priority over MMRA when events conflict. Also as a regional club, MMRA needed to provide a reason for people to join beyond it just being a social activity. In the past decade, I think we've done a good job of establishing our club as one whose primary purpose is public service. Many public service oriented hams have joined be-

#### **Notice of**

#### **Upcoming Marathon Meeting**

On Tuesday, June 16th MMRA will host a town hall session for those who participated in the 2015 Boston Marathon. This will be your opportunity to provide feedback to MMRA concerning what things went well and what things need improvement. I hope you will be able to attend.

At the Clay Center Observatory, 30 Newton St, Brookline MA. Tuesday, June 16th at 7PM.

## Bob DeMattia, K1IW, wins QST Cover Plaque award

#### K1IW Wins April QST Cover Plaque Award

TAGS: arri members, author, authors, ballot, cover plaque award, favorite article, issue, MHz, Plaque Poll web, popular article, QST Cover Plaque, vote, winner

04/15/2015

The winner of the April 2015 QST Cover Plaque award is Bob DeMattia, K1IW, for his article "Untangling Digital Voice Above 50 MHz."

The QST Cover Plaque Award -- given to the author or authors of the most popular article in each issue -- is determined by a vote of ARRL members on the QST Cover Plaque Poll web page. Cast a ballot for your favorite article in the May issue today.

cause of this.

MMRA has also developed its repeater network extensively since 2004. We have new locations as far south as Mendon and as far north as Lowell. Through the generous contributions of time, effort, and money, MMRA now has repeaters at One Financial Center and the Prudential Tower in Boston. We've added 900MHz and D-Star to our repertoire.

That being said, there have been some things that I would have liked to see improved that haven't. In my first President's Corner, September 2004, I stated "I hope to see some increased participation from all of our members." While membership activity is strong at our events, we still struggle to find members willing to serve as officers and/or in committee positions.

At the completion of my likely 12th term, I will not be running for reelection. By announcing this now, the club has a year to find someone willing and able to be the MMRA's next president.

I've enjoyed leading the club through the past decade - we've accomplished many things. I hope that the next person will be able to continue this tradition.

#### **Slate of Officers**

Report of the Nominating Committee of N1BDA, KG1H, and W1DYJ:

President	Bob DeMattia	K1IW
Vice President	Steve Telsey	N1BDA
Secretary	John McGovern	W1JMC
Treasurer	Kevin Paetzold	K1KWP
Clerk	Bob Evans	N1BE
Director »2017	Steve Schwarm	W3EVE
Director »2017	Roger Coulson	WA1NVC

#### Ongoing Directors elected last year:

Director »2016	Clark Conti	N1NVK
Director »2016	Mike Neilsen	W1MPN

-

#### April Business Meeting ~ Bob Evans, Clerk, N1BE

The MMRA Board met for a business meeting at 7PM on April 15th at Stratus Technologies in Maynard. In attendance were K1KWP, K1IW, W1DYJ, N1BE, KA3RLZ, N1BDA, WA1NVC, N1DDK, W1BRI, K1BOS, KG1H, N1NVK and (by telephone) W1MPN.

Kevin, K1KWP, gave a Treasurer's Report with an overview of the MMRA finances and membership status.

Mike, W1MPN, proposed that the board develop a formal Budgeting Process for future MMRA fiscal years, where projects would be prioritized for the fiscal year. The board was in favor and K1IW agreed to appoint a committee to develop a budget for the fiscal year that will begin in 2016.

Dave, KG1H, reviewed past and future public service events where the MMRA has involvement. Dave also suggested more MMRA involvement at the Head of the Charles Regatta in October.

Bob, K1IW and Bryan, W1BRI discussed Repeater Status including 147.27 interference (possibly seasonal); 10 Meters will be off the air for the Marathon; 449.925 IRLP node disk and audio board problem; there is no tone output on 146.67; and a 145.09 MHz digipeater to be installed at MRE.

K1IW led a discussion of alternatives in moving the 449.575 repeater from Southboro to Hopkinton. The board favored an expenditure of about \$4200 to move the repeater and do some maintenance to the 223.94 repeater already at Hopkinton. We also suggested finding another interested party doing work at the site to share costs of a tower climber. The board will present a motion for approval of this expenditure at the May membership meeting.

K1IW reviewed a contract the City of Marlborough requested the MMRA to approve. This contract

Next MMRA Business Meeting: Wednesday 17 June, 7PM Stratus, Maynard formalizes the terms under which the city provides space for the MRW repeater site. The board agreed to signing this contract with a few minor changes to the original proposal by Marlborough.

We then discussed a proposal for affiliation with New England Amateur Radio Inc. (NEAR). NEAR's purpose is to promote education and growth of amateur radio as a STEM activity (science, technology, engineering, and math), as a communications hobby, and as support for emergency preparedness and public service. K1IW appointed N1DDK to chair a small committee to hone this proposal to something the board can approve.

Patrick, KC1AJT, is a club member and a student at PACE University. He is working on a school project to develop a network of two mesh-nodes - built from Linksys routers and 3' Yagi antennas. In May, the project will be complete and he'd like to donate the equipment to the club. The board approved accepting this equipment and we look forward to working with Patrick to decide how to deploy this equipment at some MMRA sites.

We discussed the agenda for May meeting, and K1IW recruited volunteers to find speakers/organize meetings for the following year.

K1IW discussed the MMRA at Boxboro. Some members are getting together to sit at the same table at the Saturday night banquet. There are a few more seats available to make two full tables. Contact K1IW if you are interested in joining in. We also are looking for help manning the MMRA booth. (MMRA has the usual room and will be doing talk-in.)

The meeting adjourned at 8:50.

#### Public Service Report ~ David Wolfe, KG1H

Public Service Events sponsored by the MMRA or other ham organizations that members of the MMRA participate in and/or MMRA repeaters support:

CF Cycle For Life - 11 October 2014
Sutton Chain of Lights - 03 December 2014
Ashland Half-Marathon & 5K Race - 21 March 2015 (POSTPONED)
119th Boston Marathon - 20 April 2015
Run of the Charles - 26 April 2015
Project Bread's Walk for Hunger - 02 May 2015
MS Ride the Vineyard - 02 May 2015
MS Journey of Hope Walk, Natick - 16 May 2015
Westford Apple Blossom Parade - 16 May 2015
MS Cape Cod Getaway - 27 June 2015

#### **BOSTON MARATHON 2015 ~ Tom Turner, KB10QA**

Monday, April 20<sup>th</sup> was cold, showery, and in the high 30's to low 40's as I awoke at 0200 Hrs., had breakfast, and made preparations for the drive to Hopkinton, MA, the starting point for the 19<sup>th</sup> running of the Boston Marathon. I had been assigned to work as a communications "Shadow" for one of the B.A.A. employees whose duty it was to oversee the so-called "Corrals," where 30,000 runners from around the world form up to begin the 26.2 mile run to the Finish Line in Boston, MA.

Each year, approximately 300 Amateur Radio Operators volunteer their time, providing vital and needed communications services for this event. Some work outside along the course itself in various roles, while others work inside at various Net Control points along the route.

On arrival in Hopkinton, I was directed to the State Park, where I parked my car, and was taken by shuttle bus to the Town Common. Our START Team of approximately 34 Hams were issued the necessary credentials for the areas we would be working in, such as the Athletes Village, Town Common, and the Starting Line area. Our Team was also briefed on the start times of the various segments of the Marathon, along with relevant updates, such as assignment changes, weather conditions, etc.

There was a high Police presence comprised of Federal, Local, and State Law enforcement agencies and security was extremely tight, as was the case in 2014. Security sweeps took place periodically to insure the safety of everyone involved; BAA personnel, Runners, and volunteers alike.

The START Team operated on several simplex frequencies, supplemented by a repeater frequency to insure complete and seamless communications during this event.

Shortly before 10 AM, the race began. Since everyone can't be at the Starting Line at the same time, releases are staggered. The runners are released in four "waves," due to their large numbers, and it's quite a sight to see.

By 11:30 AM, the last of the runners had crossed the Starting Line and were on their way to Boston. There were no emergencies in Hopkinton involving those running or working the event. The rain began to pour as I made my way back to the Bus Stop to pick up my car for the ride home.

For new Hams interested in Public Service venues, the Boston Marathon provides a great learning opportunity. Many of us have worked this event for several years, gaining much knowledge about radio usage, and making new friends at the same time. I would recommend it to all.

#### **March Membership Meeting Notes**

# Dick Frey - WA2AAU VHF CONTESTING - Let's Just Do It

Dick is President of both the North East Weak Signal Group, the premier VHF/UHF club in the Northeast, and of the Mt. Greylock Expeditionary Force (W2SZ— the VHF contest group on Greylock Mt.)

Dick showed us how VHF Contesting works, and why it is fun. He covered how to get involved, how far you can talk, what is a rover station, and more.

Here are some of his slides.



#### **Contest Basics**



#### Introduction

#### Just What Is VHF Contesting??

- An Operating Competition On Ham Frequencies Above 50 MHz
- But It Can Be So Much More...
  - A VHF "Field Day"
  - Technical Challenge
  - Learn New Things
  - Mobile Operation (Rovers)
  - International Travel !? (Yes!)



#### Why VHF Contesting?

- It's Fun
- Improves Operating Skills
  - Especially Copying Weak Signals
- · Promotes Activity
  - As Always, Use It Or Loose It
- Encourages Station Improvement
- Encourages New Technology

R. L. Frey - WA2AA

# W2SZ/1 (The MGEF)

### How Can I Compete? Lots of Categories

- Single Operator, Low or High Pwr

   From Home, Or Go To A Hilltop
- Single Operator Portable (10 W)
- Multi-Operator (Like W2SZ/1)
- Take Your Friends With You!!
  - Unlimited or Limited version
- Rover –Drive to a lot of different good spots. (1 or 2 operators)

. L. Frey - WA2AAU

VHF Contesting – It's Really FUN!

MMRA 0315



#### How Do I Get On The Air?

- · Any Way You Can!
- What VHF Radios Do You Have?
  - Do You Have An FM Rig? Use it!!
  - How About A Multimode VHF Rig? –Even Better Yet!!
- Do You Have An HF Radio With Some VHF Bands On It? Great!
  - Many Radios Now Have 6 Meters,
     Meters or Even 432 MHz
  - Many Are Small, Nice For Mobile

R. L. Frey - WA2AAU

VHF Contesting - It's Really FUN!

MMRA 03

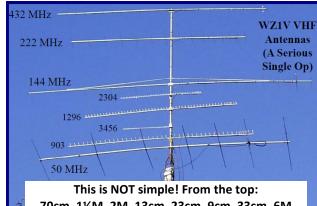
#### **March Membership Meeting Notes ~ continued**



#### What About Antennas?

- Outside Antenna Almost a MUST For Home Station Operation.
  - Get it up in the clear if you can.
  - Vert. Ground planes OK for FM
  - Horizontal Yagis Best At Lower Frequencies; uW: Loopers; Dishes
  - Try Anything You've Got to Start Even an 80 Meter Dipole on 6 M!!
- Portables and Rovers use Whips, Loops, Yagis, and Dishes – But Start Simple!

VHF Contesting - It's Really FUN!



70cm, 11/4M, 2M, 13cm, 23cm, 9cm, 33cm, 6M



#### How Far Can I Talk?

- It Depends on LOTS of Things
- If 6 Meters is open... Florida or Even California. Likely in June.
- On 2 Meters and up... Florida (if we get a rare "tropo" opening).
- More Typically, 50-200 Miles with a simple home SSB station. Much further from hilltops.
- Even on FM, 30-100 Miles is Normal



#### What Do I Say?

- Contest Exchange is Simple
- · Must Exchange Call Signs and **Grid Squares**
- Use a Map To Determine Grid
- Or GPS Lat/Long + A Program
- Please Keep A Log and Send It In
- Helps Hams Prove We're Using the Bands!! Use It or Loose It!!



#### What Frequency Do I Use?

- If on SSB or CW, Look near here 50.125, 144.200, 222.100, 432.100 903.10, 1296.10, 2304.10, etc, etc... But don't camp on these calling freqs.
- If on FM, Do Not Use Repeaters Try These Simplex Frequencies: 52.525 MHz

146.55 - Do not use 146.52 MHz 223.50 and 446.00 MHz

W2SZ/1 (The MGEF)

#### In The Car?? Get On The Air

- Even You Can Be A Rover!!
- Flip On The Radio
- · On FM? Repeaters not allowed! Common FM Contest Frequencies 146.55 MHz Do not use 146.52

223.50 MHz 446.00 MHz

Remember... know your grid! Go to more than one, have fun!

R. L. Frey



#### Now For Some Recruiting... Just Get Out There And Have Some Fun!

- Easiest Only have an FM rig?
  - Just Be a Rover In Your Car
- Have a Multi-Mode Rig?
  - Get on SSB or CW as a Rover
  - Take a Beam if you have one
- Have an Outdoor Ant. at Home?
  - Great! Get on & CONTEST!

R. L. Frey - WA2AAU

VHF Contesting - It's Really FUN!

#### Can I Join MGEF - YES! W2SZ/1 (The MGEF) Yeah... more recruiting...



- Lots of Different Ways!... Three **General Categories** 
  - 1. Hilltop Operator
  - Local Rover
  - Long-Haul Rover
  - For the Fun and Satisfaction of doing the Very Best you can!!

VHF Contesting - It's Really FUN!

#### March Membership Meeting Notes ~ continued

#### Mt. Greylock Expeditionary Force



#### **W2SZ/1 PICTURES**

- Unlimited Multi-Operator Station
- Operate From Mt. Greylock, Adams, Massachusetts – 3491 ft
- Grid Square = FN32
- Use All Bands 50 MHz 47 GHz and sometimes higher incl. light.
- Very Large Team Effort
- 15 20 People on Hill (Sat, Sun.)
- Also Lots of Rovers Near & Far



TNI



#### 6 Meter Antenna

4 Stacked
6-Element Yagis
On a 50-Foot Tower
With 20' Mast

Lately We Have Been Using 2 Short Towers With 2 Beams on Each



#### 903/1296 Dish and

B

W1SZ Setting Up 1st of 2 34-ft Two Meter Antennas For Ground Wave



#### High Microwave Tower

10 GHz WBFM 47 GHz CW 24 GHz WBFM 10 GHz CW/SSB

VHF Contesting – It's Really FUN! MMRA 03



MMRA 0315

Long I Haul Rover FN53 Maine SSB/CW All Bands Through 10 GHz

KJ1K

W2SZ/1 (The MGEF)

#### CONCLUSION

- VHF Contesting is FUN
- It's a Great Challenge
- · You LEARN Stuff
- Next VHF Contest in June...
  On June 13-14, 2015
- Summer is a Great Time!!
- Get Out There and ENJOY Mother Nature

R. L. Frey - WA2AAU

VHF Contesting – It's Really FUN!

MMRA 0315

# Want to get more information or get involved with VHF Contesting?

Check out the

North East Weak Signal Group

<a href="http://www.newsvhf.com/">http://www.newsvhf.com/</a>>

...or send <u>Dick an email</u>: rlfbauer@gmail.com

#### **Upcoming MMRA Meetings**

Wed, 24 Sept ~ Membership Meeting
The Art and Science of Radio Direction Finding, Bob Ravenstein—W1FDR
Northborough Public Library

Wed, 15 Oct ~ Business Meeting Stratus, Maynard

Saturday, 15 Nov ~ Membership Meeting
Our November meeting will be at the WTAG radio station transmitter in
Holden. Don't miss this special event!

Wed, 17 Dec ~ Business Meeting Stratus, Maynard

Wed, 21 Jan ~ Membership Meeting
New Roles for Amateur Radio in Public Service and Emergency
Communications ~ Rob Macedo, KD1CY
Westborough Public Library

Wed, 18 Feb ~ Business Meeting Stratus, Maynard

Wed, 18 Mar ~ Membership Meeting VHD Contesting — Let's Just Do It Dick Frey - WA2AAU ~ President of both the NEWS group & W2SZ Tatnuck Bookseller, Westborough,MA

Wed, 15 Apr ~ Business Meeting Stratus, Maynard

Wed, 20 May ~ Membership Meeting Annual Meeting: Officers Report and General Elections Campion Center, Weston

Wed, 17 June ~ Business Meeting Stratus, Maynard

Saturday, 22 August ~ Mid-summer Get Together Boxboro ARRL Convention Dinner

#### Don't Forget! Join Us.

Every Tuesday @ 8 PM Technical, Informational and Other Stuff Net

The MMRA's repeaters are linked Tuesday nights for the TIOS Net. Keep up with what's happening in the MMRA and ask your ham related questions.

#### **Net Control Operators:**

Week 1	WA1JIM	Jimmy Devaire
Week 2	W1DYJ	Larry Banks
Week 3	KC1CLA	Ed Curley
Week 4	K1KWP	Kevin Paetzold
Week 5	KB10QA	Tom Turner

To connect using Echolink / IRLP during the Net:

- Echolink Conference \*NEW-ENG2\*
- IRLP node 4133

#### **MMRA Leaders**

	Officers	
President	Bob DeMattia	K1IW
Vice President	Steve Telsey	N1BDA
Secretary	John McGovern	W1JMC
Treasurer	Kevin Paetzold	K1KWP
Clerk	Bob Evans	N1BE
* Technical Officer	Bryan Cerqua	W1BRI

#### **Board of Directors**

Director »2015	Steve Schwarm	W3EVE
Director »2015	Roger Coulson	WA1NVC
Director »2016	Clark Conti	N1NVK
Director »2016	Mike Neilsen	W1MPN

#### Repeater Trustees

* Belmont 145.430	James Lee	N1DDK
* Boston 927.0625	Rick Zach	K1RJZ
* Boston 146.820	John Mullaney	K1BOS
* Brookline 145.160	Joyce DeMattia	N1QPH
* Brookline 146.820 R	cvr Bob Phinney	K5TEC
* Burlington 146.715	Bruce Pigott	KC1US
* Burlington 446.775	Larry Banks	W1DYJ
* Hopkinton 223.940	James Cahill	KB1LOY
* Lowell 442.250	Vince De La Flor	K1LVF

\* Marlborough 53.810; Quincy 146.670;

Marlborough 449.575 Bryan Cerqua W1BF

\* Marlborough: 29.68, 144.390, 147.270, 224.880, 448.225, 449.925, 927.700 — all as W1MRA

	Bill Northup	N1QPR
* Mendon 146.610	Jim Podsiadlo	AE1C
* Quincy 224.40	Bill Dunn	N1KUG
* Weston 146.790	Bob Evans	N1BE
* Weston 224.700	Eddie Mulhern	N1NOM
* Weston 442,700	David Wolfe	KG1H

#### Additional, non-Voting

* Newsletter Editor	Larry Banks	W1DYJ
* Emerg. Coord.	Kevin Paetzold	K1KWP
* Pub. Serv. Coord.	David Wolfe	KG1H
* VEC Liaison	Bill Wade	K1IJ
* Net Manager	Larry Banks	W1DYJ
* Web Page Editor	Bob DeMattia	K1IW
	* Appointed	

Previous issues of the MMRA Newsletter are available at:
www.mmra.org → Newsletter Archive (on the left)

#### **MMRA VE Sessions**

Second Saturday 9 AM at the Marlboro Public Library

Contact: Bill Wade, K1IJ 781-891-9079

Evenings 6 - 10 PM Weekends 8 AM to 10 PM.

Accredited by the ARRL VEC

#### Membership Meeting ~ Wednesday, May 20 ~ 7 PM

# Officers Report to Members and General Elections

The Campion Center, 319 Concord Road, Weston *Talkin: 146.79* 

#### **Calendar of Ham Radio Flea Markets**

For more information: http://mit.edu/w1gsl/Public/ne-fleas

9	May	E Greenbush NY	<b>EGARA</b>	@FireCo
17	May	Cambridge MA	Flea at	MIT
30	May	Goshen CT	Sobarc	@FG
30-	-31 M	ay Whitman MA	WARC	@KoC
31	May	Fishkill NY	MtBARC	@QWL
31	May	Queens NY	HOSARC	@HoS
6	Jun	Hermon ME	<b>PSARA</b>	@HS
6	Jun	Windsor CT	VR+C Mu	S
			115 Pie	rson LN
7	Jun	Bethpage NY	LIMARC@	Briarcliffe
20	Jun	Newington CT	NARL	@StMary
21	Jun	Cambridge MA	Flea at	MIT

21,23 Aug Boxboro	MA FEMARA NE Conv
30 Aug Adams MA	NoBARC @BoweFld
5 Sep Windsor CT	VR+C Mus
	115 Pierson LN
13 Sep Ballston Spa	a NY SCRACES @FG
13 Sep Newtown CT	CARA @TownHall
19 Sep Forestdale	RI RIAFMRS@VFW
20 Sep Cambridge M	A Flea at MIT
26 Sep Brookline N	H NEARC Antique
16,17 Oct Deerfie	ld NH NEARfest XVIII
25 Oct Hicksville	NY LIMARC @LevitHall
14 Nov Bourne MA	FARA@UpperCC VoTech

THE MINUTEMAN REPEATER ASSOCIATION

MMRA P.O. Box 669 Stow, MA. 01775-0669

Email: contact@mmra.org



WE'RE ON THE WEB HTTP://WWW.MMRA.ORG/

## Have you renewed your membership yet?

All 2014 memberships expired on August 31st! Time to renew either on the Member's login link at www.mmra.org or by U.S. Mail with a check