



The Minuteman Repeater Association

The Minuteman

Volume 39, Number 5

May 2010



Membership Meeting ~ Wednesday, 19 May 2010 @ 7:00 PM

Astronomy Night

MMRA General Elections

The Clay Center Observatory

Six NASA Astronauts are members of the Clay Center Amateur Radio Club! Three students will fly on NASA Hyabusa recovery mission! Come learn about the Clay Center's latest projects in research and education

Talk in — 146.82 ~ Directions on Page 3

Guest speakers: Ron Dantowitz, Director, Clay Center Observatory, and Marek Kozubal KB1NCG, Research Scientist and Astronomer

General Elections—Slate

| | | |
|-------------------|----------------|--------|
| 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 |
| Director »2011 | Steve Schwarm | W3EVE |
| Director »2011 | Roger Coulson | WA1NVC |
| Director »2012 | Clark Conti | N1NVK |
| Director »2012 | Mike Neilsen | W1MPN |

The ARRL New England Convention (Boxboro) is on for August 26-29 at the Holiday Inn in Boxboro.

Tickets are on sale on line at the convention website
<http://www.boxboro.org>

Members who renew for two years at the convention also receive three free tickets to the MMRA convention raffle, where this year's prizes include an MFJ antenna analyzer, an Alinco 222 MHz HT, and possibly some other great items.

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MMRA VE Sessions

3rd Saturday of each Month

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

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 September, November, January, March, and May. Meeting time, locations and talk-in frequency vary. These are announced in the newsletter and on weekly nets. Meetings are open to all interested parties.

The Minuteman newsletter is Emailed one week before each meeting. Members are encouraged to submit articles. Articles may be sent to the editor via email to 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.yahogroups.com/

No part of this newsletter can be copied or posted elsewhere without prior approval from the club. Your cooperation in this matter is appreciated.

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 (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 date of any incident. Measures are being taken to make audio recordings of repeater activity.

Repeater and Frequency Information

Up-to-date information about both MMRA repeaters and affiliate repeaters can be found at

<http://www.mmra.org/repeaters/index.html>

| Location | MHz | PL | Call | Linking | |
|----------------------|--|-------|--------|---------------------------------|------------------|
| | | | | To Hub 1 | To Hub 2 |
| MMRA Voice Repeaters | | | | | |
| Marlborough | 29.680 | 131.8 | W1MRA | PTL | — |
| Marlborough | 53.810 | 71.9 | W1BRI | PTL | — |
| Boston | 145.160 | — | W1MRA | D-Star | |
| Belmont | 145.430 | 67.0 | WA1RTT | — | — |
| Mendon | 146.610 | 146.2 | AE1C | FTL | PTL |
| Quincy | 146.670 | 146.2 | W1BRI | PTL | PTL |
| Burlington | 146.715 | 146.2 | N1NVL | PTL | PTL |
| Weston | 146.790 | 146.2 | N1BE | PTL | FTL Hub2 10-4 |
| Brookline | 146.820 | 146.2 | K5TEC | FTL | PTL |
| Marlborough | 147.270 | 146.2 | W1MRA | PTL | PTL |
| Hopkinton | 223.940 | 103.5 | K1KWP | FTL | — |
| Quincy | 224.400 | 103.5 | N1KUG | Off the Air | |
| Weston | 224.700 | 103.5 | N1NOM | FTL | PTL |
| Marlborough | 224.880 | 103.5 | W1MRA | PTL | FTL |
| Weston | 442.700 | 88.5 | W1MRA | Network Hub 2 (PTL to Hub 1) | |
| Burlington | 446.775 | 88.5 | W1DYJ | FTL | PTL |
| Southbor- ough | 449.575 | 88.5 | W1BRI | PTL | — |
| Marlborough * | 449.925 | 88.5 | W1MRA | Network Hub 1 | |
| Boston * | 927.0625 | D244 | K1RJZ | PTL | — |
| Marlborough * | 927.700 | D244 | W1MRA | PTL | — |
| MMRA “Other” Systems | | | | | |
| Marlborough | 144.390 | none | W1MRA | APRS Digipeater | |
| ??? | 145.630 | 146.2 | W1MRA | Fox Box | |
| * Internet | 449.925: Echolink node 94940; IRLP node 4133 | | | | |
| | 927.0625: IRLP node 4977 | | | | |
| | 927.700: IRLP node 4978 | | | | |

Notes: FTL = Full Time Linked (or default state)
PTL = Part Time Linked (on schedule or demand)
Note — a repeater can be linked to only one Hub at a time.

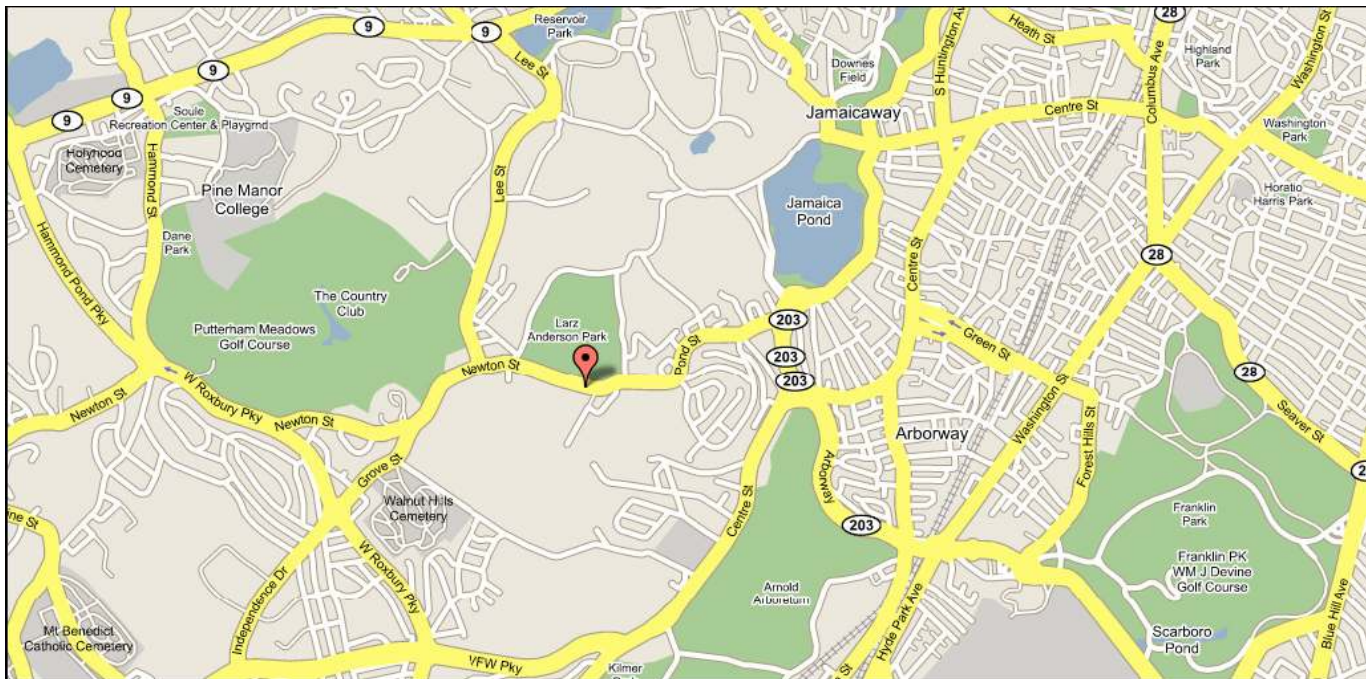
PL: PL is required to prevent interference. The code **750** will temporarily disable the MMRA PL on the 2M repeaters.

Autopatch: Only the Hub 1 has a telephone line. Link to Hub 1 if necessary, then bring up the autopatch using the 449.925 autopatch codes.

Membership Meeting ~ 19 May — 7:30PM **Astronomy Night (and General Elections)** **The Clay Center Observatory**

Talk in freq: 146.82

More information on Page 1



We will be meeting at **The Clay Center Observatory**, 20 Newton Street, Brookline, MA 02445. The Clay Center information phone number is 617-454-2718 **Please monitor the talk-in on 146.82 in case we must make a last-minute change of plans.**

From the West:

Follow Route 9 into Brookline. At the intersection with Chestnut Hill Ave near the Brookline Reservoir turn south onto Lee Street, keeping right at merge with Clyde Street. Continue to the end at the traffic lights and get in left lane. Turn left onto Newton Street, stay in right lane, and look for red tile and stucco buildings on your right. Turn right onto St. Paul's Avenue (some maps call it Mt. Walley Ave.) (Private Way) For the Clay Center: Take 2nd right through main gate, travel up the hill, bear LEFT, over top of hill, and park on Athletic Center roof deck.

From the East:

Follow the Jamaicaaway into Jamaica Plain. Follow the Jamaicaaway south, keeping Jamaica Pond on your right. (Ignore the Pond Street that goes east at the pond.) When the road is

split by a tree-lined park, get in the right lane and turn right at the traffic lights onto the Pond Street that heads west, up hill, and around many sharp curves. When the road straightens out look for Hopkins Road on your left. Take your next left onto St. Paul's Avenue (some maps call it Mt. Walley Ave.) (Private Way). For the Clay Center: Take 2nd right through main gate, travel up the hill, bear LEFT, over top of hill, and park on Athletic Center roof deck.

From the South:

Follow the VFW Parkway into West Roxbury. After Corey Street get in left lane. Look for signs for "Village at Chestnut Hill" and Bertucci's. Turn left onto Independence Drive, follow through lights, then straight through rotary onto Grove Street. Stay in right lane, and go straight ahead at lights by Exxon Station. You are now on Newton Street. Follow Newton Street through traffic lights at Clyde Street. Stay in right lane, and look for red tile and stucco buildings on your right. Turn right onto St. Paul's Avenue (some maps call it Mt. Walley Ave.) (Private Way). For the Clay Center: Take 2nd right through main gate, travel up the hill, bear LEFT, over top of hill, and park on Athletic Center roof deck.

Public Service

Bruce Pigott — KC1US — Public Service Coordinator

Operating at Public Service events has a certain flow to it and certain procedures. First, the communications involve setting up of the route and water stops. Then participants start with the more athletic types at the front. A rising tide of participants follows, then a tapering, which slows down to a trickle and picking up of supplies and equipment. The messages are of tactical nature and do not need the formal requirements of the National Traffic System. Since these events happen during the warmer weather, it is usually a nice day to be outside, not cutting the grass. It is a less stressful way to learn the features of your radio and practice setting up of equipment.

Depending on the size of the event you may be part of a team or by yourself. At the Boston Marathon, the Red Cross aid stations are staffed with three operators — important due to the amount of communications at times. It also allows less experienced hams to learn from those with more experience. After being at a few events, you will be the only communicator at a location, and most of the other event volunteers helping will have less experience than you.

Here are a few tips based on listening to communica-

tions at events through the years:

Use plain language - Q signals, Morse code prosigns, and funny phonetics are unnecessary on voice channels and reduce message comprehension.

Push to talk, Wait to talk - All repeaters have delay. Some have more transmit delay than others, especially linked systems.

Take it off your belt. Leaving your hand held radio next to your body will cause up to a 15dB loss in transmit power. Your two watts are reduced to only 1/16 of a watt.

Upcoming event: June 26 and 27 is the MS150 Cape Cod Getaway scenic bicycle tour from Quincy to Provincetown. As it is on Field Day weekend, there is a lot of competition for operators. See the list at the end of this newsletter for contact details. One club that is looking for more support at a number of events is the Boston Amateur Radio Club. Their calendar is listed in the current newsletter available at <http://www.barc.org/>.

President's Corner

Bob DeMattia — K1IW

As always, we will be wrapping up the MMRA calendar year with our May meeting. We will be meeting at the Clay Center Observatory in Brookline where a member of the observatory staff will brief us in developments in astronomy and in particular one aspect of their work there.

After this meeting, the MMRA doesn't completely go to sleep however. Summertime weather allows us to complete infrastructure projects that we don't get to when it's cold. Look for our new 7330 controllers to come online at our HUB1 and HUB2 repeaters. The existing 7K controllers that are at these sites will be redeployed to our Hopkinton and Southborough sites. Also on the list is an upgrade to our 10m transmitter antenna location in Marlborough. It will be moved from its low spot on a storage building to the top of the crank-up mast - an increase of approximately 30 feet.

Finally, look for the MMRA suite at the Boxboro convention in August. We will be providing talk-in for the convention.

The suite also has a member's reception area with soft drinks and light snacks for members. The suite is also a great way to renew your membership in person. Members who renew for two years at the convention also receive three free tickets to the MMRA convention raffle, where this year's prizes include an MFJ antenna analyzer, an Alinco 222 MHz HT, and possibly some other great items. Even if you don't renew, or if you do but want to purchase additional tickets, the raffle tickets are sold for \$2 each, 3 for \$5, or 7 for \$10. Tickets are only available for purchase at the convention. The drawing is held in our suit just before we shut down the main convention drawing. You need not be present to win.

If you are not going to attend the convention, you can still renew your membership online from our club website. All memberships run September through August, so why not take the opportunity to renew today for next year!?

73 — Bob

Digital Update ~ How to connect via Echolink or IRLP

Bob DeMattia — K1IW

MMRA repeaters are on automatic schedulers which allow the network to reconfigure on its own several times during the week. On Tuesdays at 8PM, most MMRA repeaters link together for the MMRA Technical Information and Other Stuff net. On other weeknights, they link up at 10PM for the Heavy Hitters traffic net. The links disconnect just before midnight. To see which repeaters link up, see our website: <http://www.mmra.org/repeaters>, then click on "Table View".

The 900 MHz repeaters are normally linked to the NEAR-900 net, a collection of 900 MHz systems tied to IRLP re-

flector 9125. On Tuesdays, the 449.925 and the two 900 machines link together through IRLP reflector 9122.

If you want to join our net on Tuesday nights, you will not be able to connect directly to the HUB. Instead, connect to the New England reflector. This reflector can also be reached via EchoLink at *NEW-ENG2* or IRLP node 9127. The reflector allows a lot more Echolink users than our HUBs node can, as well as allowing the 900 MHz repeaters to be linked. For more information on the New England reflector, go to <http://new-eng.com>.

March Membership Meeting

The March Members Meeting was held at the MEMA bunker in Framingham on 24 March. Featured speaker was Ed Hare, W1RFI, ARRL Lab Manager, who told us about the latest activities at the ARRL Lab. Here are some photos from the night:

With the successful completion of the Larcan Amplifier Fundraiser, President Bob, K1IW, presents



Rick, K1RJZ, with a "Thank You" — a plaque and a \$50 gift certificate.



Other awardees include Mike Keller, Dave Beauvais, Doug Durkee, and Robert Maw.



The MAIN EVENT!
You had to be there...



SKYWARN Storm Spotter training ~ Steve Telsey, N1BDA

There will be a SKYWARN Storm Spotter training class May 15 at Concord Academy, in the Ransome room of the Math and Arts Center which is located across from the Gym. Concord Academy is located at 166 Main Street in Concord. Parking at the school is limited; however, there is a municipal parking lot off of Main Street on Keyes Road. The training is scheduled to begin at 10:00 AM.

Rob Macedo, KD1CY a 15-year veteran of the NWS SKYWARN program will be the presenter. The program covers topics such as hurricanes, lightning, tornadoes, down bursts and other summer and winter weather events. This highly informative and timely program will also provide information on identifying cloud formations, identifying hail sizes and estimating wind speed.

This program is open to all and will be of particular interest to anyone who enjoys outside activities such as sports, camping, boating or is just interested in learning more about the weather. This program will also cover safety tips that are appropriate during severe weather events.

The workshop is free, the multi-media presentation is captivating, and the handouts (new this spring) are excellent and informative reference materials. At the end of the program participants will have the opportunity to join the National Weather Service SKYWARN Spotters Program.

Please pass the word and encourage hams and non-hams alike to join us on May 15.

March 6 Foxhunt Results Charlie Suprin, AA1VS

The call of the fox lured many a hunter out from their winter den. The fox hid on the Weston 146.790 repeater while the hunters used their traditional shotgun start. The hunters cornered the fox at the end of Cranberry Circuit in Sudbury, near the borders of Sudbury, Maynard, Acton, and Concord. After the first foxhunt, there was an optional second foxhunt on 902.5 simplex for the hunters. This hunt brought out several teams and an interesting collection of hunting gear.

The teams found the primary fox in the following order.

- 1st Place at 11:05: N1OMJ, K1BOS, N1DIZ, N1TBN
- 2nd Place at 11:20: KB1TEH, KB1REQ, NI1X
- 3rd Place at 11:52: W1/VK3MD
- 4th Place at 11:53: WB1W
- 5th Place at 12:35: KB1NXM

The hunters used varied tools in their hunt. Tape measure yagis were common. One Doppler system appeared. L-per and ARDF gear also appeared. Also most stations were able to copy the 900MHz fox using either an extended receive amateur radio, a scanner or modified commercial equipment.



Back row left to right: Dennis Ditto N1DIZ, John Mullaney K1BOS, Alan Marchioni N1TBN and Bob Rogers WA1PIO - the fox. Front kneeling left to right: Charlie Suprin AA1VS Assistant Fox and Mike Giovannucci N1OMJ.

6M Work at MRE

Some pictures from the recent project to improve the 6M repeater transmitter at MRE.



Bryan, W1BRI, and Bob, K1IW, checking out the SWR of the 6M new antenna.



The new "very high-end Kreco co-plane" 6M antenna.

Bryan, W1BRI, also replaced the MASTR-II 1/4 kW tube type (4CX250) PA with a solid-state "Larcen Ionosphere Hole-Burner" running at a leisurely 350 watts.

MMRA April Board of Directors Meeting

Attendees: K1KWP, K1IW, W1BRI, N1NVK and W1MPN.

Moved and voted to spend \$350 on Boxboro prizes.

Moved and voted to put the current officer slate up for re-election.

Repeater progress:

Quincy 220 — Bryan will continue to work on it with the hope of repairing it before we buy a new one.

MRE — The tree work is complete. W1BRI and K1KWP lowered the crank-up mast and started to remove the existing 6m antenna. (See more information about replacing the 6M antenna elsewhere in this Newsletter.)

Don't Forget! Every Tuesday @ 8 PM Technical, Informational and Other Stuff Net

The MMRA's repeaters are linked Tuesday nights for the TIAOS Net. Join us! This is a good way to keep up with what is happening in the MMRA and ask your ham related questions. **We need another net control!**

If you would like to try your hand at Net Control contact me at W1DYJ@mmra.org — we have a script you can use to start with. This is good practice for a number of ham related operations, from emergency preparedness to contesting.

Current Net Control Operators:

| | | |
|--------|--------|----------------|
| Week 1 | WA1JIM | Jimmy Devaire |
| Week 2 | ??? | OPEN |
| Week 3 | W1DYJ | Larry Banks |
| Week 4 | K1KWP | Kevin Paetzold |
| Week 5 | W1DYJ | Larry Banks |

To connect using the digital modes, use the New England Reflector:

For IRLP use node 9127

For Echolink, connect via *NEW-ENG2*. You can find this under "Node Types" >> "Conferences"

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 »2010 | Clark Conti | N1NVK |
| Director »2010 | Mike Neilsen | W1MPN |
| Director »2011 | Steve Schwarm | W3EVE |
| Director »2011 | Roger Coulson | WA1NVC |

Repeater Trustees, Appointed

| | | |
|--|----------------|--------|
| Belmont 145.430 | Larry Arone | WA1RTT |
| Boston 927.0625 | Rick Zach | K1RJZ |
| Brookline 146.820 | Bob Phinney | K5TEC |
| Burlington 146.715 | Chris Conti | N1NVL |
| Burlington 446.775 | Larry Banks | W1DYJ |
| Hopkinton 223.940 | Kevin Paetzold | K1KWP |
| Marlboro 53.810, Quincy 146.670, Southboro 449.575 | Bryan Cerqua | W1BRI |
| Marlboro 144.390, 145.160, 147.270, 224.880, 449.925, Weston 442.700, 927.700 — all as W1MRA | | |
| | Bill Northup | N1QPR |
| Mendon 146.610 | Jim Podsiadlo | AE1C |
| Quincy 224.400 | Bill Dunn | N1KUG |
| Weston 146.790 | Bob Evans | N1BE |
| Weston 224.700 | Eddie Mulhern | N1NOM |

Appointed, non-Voting

| | | |
|-----------------------|----------------|-------|
| Newsletter Editor | Larry Banks | W1DYJ |
| Emergency Coord. | Kevin Paetzold | K1KWP |
| Public Service Coord. | Bruce Pigott | KC1US |
| VEC Liaison | Bill Wade | K1IJ |
| Net Manager | Larry Banks | W1DYJ |
| Web Page Editor | Bob DeMattia | K1IW |

Upcoming MMRA Meetings

All meetings start at 7:00 unless otherwise noted.

| Date | Location | Feature |
|---------------|-------------------------|--------------------------------|
| Wed, Sep 16 | 7PM Westborough | Membership Meeting |
| Wed, Oct 21 | Stratus | Board Meeting |
| Wed, Nov 18 | 7 PM Milton Library | PAVE PAWS ~ Membership Meeting |
| Wed, Dec 16 | Stratus | Board Meeting |
| Wed, Jan 20 | Sthboro Hse of Pizza | Membership Meeting |
| * Wed, Feb 10 | Chin's Garden, Marlboro | Board Meeting |
| * Wed, Mar 24 | MEMA, Framingham | W1RFI — The ARRL Lab |
| * Wed, Apr 14 | Chin's Garden, Marlboro | Board Meeting |
| Wed, May 19 | Clay Center, Brookline | Annual Meeting |

*** Not the 3rd Wednesday or not the normal time of 7:00PM**

Membership Meeting ~ Wednesday, 19 May 2010 @ 7:00 PM

Astronomy Night & MMRA General Elections

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Talk in — 146.82

Calendar of Ham Radio Events

Public Service Events

See this web site for contact information
<http://purl.org/hamradio/publicservice/nediv>

| | | |
|-----------|--------------------|-------------------------|
| May 22 | Natick MA | MS Journey of Hope Walk |
| May 23 | Devens MA | Parker Classic |
| Jun 26,27 | Quincy MA to PTown | MS Cape Cod Getaway |
| Jul 3-5 | Fitchburg MA | Longsjo Classic |
| Jul 17 | Concord MA | MS Minuteman Ride |
| Jul 24 | Devens MA | Alzheimer's Memory Ride |

New England Area Ham - Electronic Flea Markets

See this web site for contact information
<http://mit.edu/w1gsl/Public/ne-fleas>

| | | |
|-----------|------------------|----------------|
| 16 May | Cambridge MA | FLEA at MIT |
| 22 May | Goshen CT | SoBARC |
| 29 May | Vernon CT | NARC |
| 4 Jun | Feeding Hills MA | HCRA Tail Gate |
| 5 Jun | Hermon ME | PSARC |
| 12 Jun | Windsor CT | VR+C Mus |
| 12 Jun | Rochester NH | GBRA |
| 9 Jun | Newington CT | NARL |
| 19 Jun | Windsor VT | CVFMA |
| 24 Jul | Thomaston ME | PBARC |
| 24 Jul | N Haven CT | Yankee Peddler |
| 14 Aug | Gales Ferry CT | RASON |
| 14 Aug | Swanton VT | StAARC |
| 22 Aug | Adams MA | NoBarc |
| 27,29 Aug | Boxboro MA | FEMARA NE Conv |

THE MINUTEMAN REPEATER ASSOCIATION

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Stow, MA. 01775-0669

Email: contact@mmra.org



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