We have TWO! (2) MMRA meetings this month!!!

Northeast HamXposition @Boxboro! 2019

Sunday, 8 Sept., 12:00—13:00
Board Room

Dave Hornbaker ~ N1DCH

Dave will lead a presentation on the MMRA repeater network followed by our annual raffle drawing.

1st prize: Icom IC2730A Dual Band Mobile transceiver
2nd prize: Yaesu FT-65R Dual Band Analog/Digital Handheld
3rd prize: ZumSpot USB Digital Hotspot .

Join us for dinner Friday and/or Saturday night!

Friday night is the DX Dinner, Saturday Night is the Grand Banquet. There are Door Prizes! The price will be $35 per seat for a place at the MMRA table.

Check our website (mmra.org) for details and dinner tickets.

Membership Meeting
Wednesday, 18 September 7:30 PM

Two Ideas for Skyhooks
Larry Banks, W1DYJ

After purchasing a second home on the coast of Maine, Larry had to build a new ham station from scratch. This talk describes the concept, design, and implementation of an 18' rotatable mast for a 6m Yagi, and a 34' mast for HF dipoles.

This is NOT a "how to" talk. It is an "ideas" talk and has some practical ideas for construction that you may be able to use yourself.

Location [see page 11]:
New England Sci-Tech Inc.
16 Tech Circle   Natick MA

Talk-in: 147.27 pl 146.2

Annual Meeting Election Results

- N1DCH David Hornbaker – President
- WA1MDD John Spencer – Vice President
- K1KWP Kevin Paetzold – Treasurer
- W1HFP Jason Peardon – Secretary
- KC1JUO Charles Miller – Clerk
- K1IW Bob DeMattia – Director → 2021
- WA1NVC Roger Colson – Director → 2021

Table of Contents

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 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: send 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.

Contact information is listed on the top of the last page of this newsletter.

No part of this newsletter can be copied or posted elsewhere without prior approval from the club.

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 date of any incident.

Repeater and Frequency Information

Band	XMTR Location	Freq	PL	Call	Linking To Hub 1	Linking To Hub 2
MMRA Voice Repeaters						
10m	Marlboro East	29.680	131.8	W1MRA	PTL	PTL
6m	Marlboro East *Rmt receive Marlboro West: PL=100*	53.810	71.9	W1BRI	PTL	PTL
2m	Brookline	145.160	na	K1MRA	D-Star (REF050C)	
	Belmont	145.430		KC1CLA	PTL	FTL: DARI
	Mendon	146.610		K1KWP	FTL	PTL
	Quincy	146.670	146.2	W1BRI	PTL	PTL
	North Reading	146.715		KC1US	PTL	PTL
	Weston	146.790		N1BE	PTL	PTL
	Boston *Remote receive in Brookline*	146.820		K1BOS	FTL	PTL
	Marlborough	147.270	146.2	W1MRA	PTL	PTL
1¼m	Marlborough	223.940		W1MRA	PTL	FTL
	Quincy	224.400	103.5	N1KUG	PTL	FTL
	Weston	224.700		N1NOM	PTL	FTL
	??????	224.880		?????	PTL	FTL
70cm	Lowell	442.250		K1LVF	FTL	PTL: 446.775
	Weston *	442.700	88.5	W1MRA	Network Hub 2 (PTL to Hub 1)	
	North Reading	446.775		W1DYJ	FTL	PTL
	Marlborough	448.225	na	W1MRA	D-Star (REF050C)	
	Hopkington	449.575		W1BRI	PTL	PTL
	Marlborough *	449.925	88.5	W1MRA	Network Hub 1	
33cm	Boston *	927.0625		K1RJZ	PTL	PTL
	Marlborough * *PL out = 131.8*	927.700	D244	W1MRA	PTL	PTL
Marlborough		144.390	none	W1MRA	APRS Digipeater	
???		145.630	146.2	W1MRA	Fox Box	

*Internet	
HUB1— 449.925: IRLP node 4133 / Echolink node 4133	
HUB2 — 442.700: IRLP node 4136 / Echolink node 4136 Connected to 220 Reflector 9124 on Tuesdays	
927.0625: IRLP 4977	Normally linked to the NE900 Reflector, 9125. Linked to MMRA via IRLP for the TIAOS net. Normally linked
927.700: IRLP 4978	

Notes: FTL = Full Time Linked (or default state)   PTL = Part Time Linked (on schedule or demand)

President's Corner ~ David Hornbaker , N1DCH

It has been a busy summer! New antennas have been installed for Marlborough 223.940, 448.225, APRS and the remote 6-meter receiver. The shelters at both MRE and MRW were painted and MRE got a new mast, thanks to all who participated on the work parties. There was some lightning damage to the router and DSL equipment at MRW, which resulted in internet loss for about a week. Special thanks to Bob, K1IW for his hard work with our DSL vendors to get things back up. The surge came in via the DSL line but no repeaters or antennas were damaged.

This should be a reminder to all of us to make sure our stations are properly ground and to consider disconnecting antennas when not in use.

I look forward to seeing everyone at HamXpostion. Drop by our room and say hi! We will be holding a raffle, details on prizes and entry are on mmra.org. Raffle drawing will be on Sunday at the MMRA session. MMRA will also be hosting a table at the Friday and Saturday evening dinners. Tickets are $35 per person (discounted) and can be ordered at mmra.org/renew.html. Raffle tickets may also be purchased at mmra.org/renew.html

All memberships expire in August! You can renew membership online using PayPal at mmra.org/renew.html, or send a check to Minuteman Repeater Association, PO Box 669, Stow, MA 01775-0669, or in person at HamXpostion (cash and check only). If you renew for 2 years (expiration in 2021), you will get 1 entry to the MMRA raffle.

> **If you haven't updated your MMRA profile in a while, now is the time! Go to MMRA.ORG and log in to do so.**

From the Treasurer ~ Kevin, K1KWP

Recent Donations

In previous newsletters we listed donations for the last couple years. To continue that acknowledgment on behalf of the MMRA board and the MMRA membership we would like to thank the individuals below for their recent donations (since the list published in the March 2019 newsletter):

AC1BG KC1KOV KF1KI W1IPI AC1DO W3EVE KE3KK K1MOQ KC1CLA KC1IUN

Membership Report/Renewals

The MMRA membership year runs from September 1 until August 31 of each year. There is a grace period for those who have not renewed from September 1 until January 1. Unless you are already renewed for 2019-2020 (or later) your membership probably expires on August 31 (before the Northeast HamXposition@Boxboro 2019). Ninety Seven members have already renewed for 2019-2020. Eighteen members have already renewed for the 2020-2021 year. These 18 members will be receiving free MMRA door prize tickets for the drawing at the Northeast HamXposition@Boxboro 2019. Any renewals for 2020-2021 before Sept 1 will also receive free MMRA door prize tickets.

New paid members

On behalf of the MMRA board and the MMRA membership we would like to acknowledge and welcome the individuals below who joined the MMRA since the March newsletter.

AB1JG K1YW K2VUD KC1HQZ KC1IUN KC1KOY KC1LNQ KC1LPZ KE4NTU N1HMT W1HFP

Newly licensed Ham Members

For several years the MMRA has been offering free memberships to new hams. On behalf of the MMRA board and the MMRA membership we would like to congratulate and welcome the individuals below who recently received licenses and joined the MMRA since January 1:

AC1HS KC1LPY

May 2019 Annual Meeting Minutes
Charles Miller, KC1JUO ~ Clerk

Meeting called to Order: 19:12 by Dave Hornbaker, N1DHC, at New England Sci-Tech
Attendance: A quorum existed within all categories

Vote for Club Officers
With no nominations from the floor, the clerk was directed to cast one voted for the slate of officers. (See page 1.)

Annual Repeater Maintenance Fund ($2500) - Unanimous acceptance
Comment: the 2018 allocation was spent
Suggestion: Membership will be made aware of expenditures greater than $500 - Maintenance budget of $2500 has been approved unanimously.

Treasurer's Report -
Electric Power was ~1/4 of 2018/2019 money spent
Repeater Improvement ~1/3 of 2018/2019 money spent

Discussion Topics:
New Membership Discussion - @19:35
Tuesday Night Net / See MMRA website for details
Paint Party : June 1 & June 8 / Reference Email Listing

Meeting Presentation: Hot Spots ~ Dave Hornbaker, N1DCH : See slide selection below

Meeting Adjourned @ 21:00+

These are a selection of the slides from the Annual Meeting talk in May.
The full slide set is available at: **https://www.qsl.net/n1dch/** .

Introduction to Hotspots
David Hornbaker N1DCH

What is a Hotspot

- Low power transceiver (~0.7mw)
- Modem
- Computer with an Internet connection
- Multi-Mode (D-Star, YSF, DMR, NXDN, P25)
- Connects local RF to a reflector
- Limited cross-mode support
- Wires-X is not available on non Yaesu equipment

Why do I need a hotspot

- No repeater for mode x
- Local repeater cannot connect to the talkgroup you want
  - D-Star XRF,DCS,XLX reflectors
  - DMR – local repeater DMR-MARC need to connect Brandmeister talkgroup
- Portable hotspot + Wi-Fi hotspot

Reflectors/ Talkgroups/ Rooms

Reflectors – D-Star, P25, DMR+
Talkgroups – DMR, NXDN
Rooms – YSF, Wires-X

All basically the same thing – A server on the internet that links up nodes (repeaters, hotspots, radios)
This presentation will use Talkgroup

May 2019 Annual Meeting Presentation ~ continued

Available Hotspots

- OpenSpot2 – Proprietary
- DVMega – Pi-Star (Dual band version available)
- ZumSpot – Pi-Star (Be sure and buy the case, the OLED is very fragile)
  - ZumSpot – Bluetooth board replaces the Pi (BlueDV - IOS, Android, Windows)
- Zumspot USB – Pi-Star or BlueDV (Windows 10 PC)
- Others
- Build your own
  - MMDVM Pi hat or USB and a Raspberry PI 3
  - Pi-Star

MMDVM boards

- Two types repeater and hotspot
- ZumSpot and DVMega both sell just the MMDVM hat
- Several USB sticks
- N5BOC – Nice looking board, very had to get – sold out
  - 4 layer with radio on top and computer on the bottom. Two middle layers are +3.3v bus and ground. Pi Zero form factor
  - Simplex and Duplex versions available $65 - $110
- Lots of Chinese knock-offs on Amazon and E-Bay $25 - $50
  - Two of my MMDVM boards are cheap Chinese boards from eBay

Simplex or Duplex

- Simplex
  - Easy to setup and use
  - For D-Star DR mode, configure as a repeater with +0 offset
  - Difficult on busy talkgroup, may need use Pi-Star dashboard to drop talkgroup
- Duplex
  - Much more difficult to setup, requires expert mode tweaking
    - Fine tuning can take a while to get just right
  - Since there is a separate receiver, you can control with the radio
  - Both time slots available on DMR
  - Some boards may require > 5MHZ offset

Expert Mode

- Needed to fine tune hotspot
- Adjust offset – some boards have a listed TX/RX offsets
- OLED type - .9 inch OLED is type 3, 1.3 inch OLED is 6
- DMR TX level may need adjusting especially on duplex hotspots
- Upgrades
- SSH access from webpage
- BrandMeister API Key

Backup and Updates

- Backup often - Backup option on the Admin page
- Hotspots will update over night if left on
  - Manually update from Admin or Configuration page
- Check for MMDVM firmware updates
  - Pstar-mmdvmhshatflash, pistar-zumspotflash

BrandMeister

- BrandMeister SelfCare - https://brandmeister.network/?page=selfcare
- Setup Hotspot Security
- Configure APRS
- Add Static Talkgroups to a hotspot
- BM API Key

References

- Pi-Star – http://pistar.uk
- Pi-Star Forum - https://forum.pistar.uk/
- Pistar-mmdvmcal - http://www.k9npx.com/2019/02/hotspot-offset-calibration.html?m=1
- W1MSG Videos - https://www.youtube.com/channel/UCcjYJtognBaSAa-ZLk3EU2A/videos
- BrandMeister - https://brandmeister.network
- DMR ID – http://RadioId.net

Vendors

- HRO
  - Zumspot with OLED - https://www.hamradio.com/detail.cfm?pid=H0-016491
  - Zumspot OLED case - https://www.hamradio.com/detail.cfm?pid=H0-016583
  - Zumspot with Nextion - https://www.hamradio.com/detail.cfm?pid=H0-016721
- C4 Labs – Manufacture of cases for PI and Ardunio
  - https://www.c4labs.com/product-category/cases/mmdvm-hotspots/
- DVMega - http://www.dvmega.nl/
  - Bridgecom Systems - https://www.bridgecomsystems.com/collections/hotspots
  - Amazon
  - Gigiparts
- N5BOC - https://www.store.n5boc.com/

These are just a few of the slides, and doesn't cover configuring hotspots and other important topics. See the full slide set at: https://www.qsl.net/n1dch/ .

June 2019 Business Meeting Minutes
Larry Banks, W1DYJ ~ Clerk, *pro tem*

Meeting called to order at 7:27 PM EDT at New England Sci-Tech

Present: Dave, N1DCH; Bob, K1IW; Clark, N1NVK; Bryan, W1BRI; John, WA1MDD; Roger, WA1NVC; Bruce, KC1US; Kevin, K1KWP; Larry, W1DYJ and by Phone: Jason, W1HFP; Ed, KC1CLA

HamXposition 2019 @Boxboro
MMRA Participation:
- We will have the usual room
- We will once again do "talk-in"
- We will have a raffle. Prizes:
    - Icom Dual-band Mobile Rig - IC2730A
    - Yeasu Dual-band HT – FT-65R
    - Hotspot - ZumSpot USB Digital
    - Note: hams directly involved in raffle are not eligible to win

Friday and Saturday Dinners
- Bob (K1IW) will set up web for payment DONE
- Checks can also be mailed to John, WA1MDD: NO RESERVATIONS WITHOUT UP-FRONT PAYMENT

Program centerfold design (MMRA Advertisement)
⇒ Larry, W1DYJ, volunteered to generate
Presentation requested Sunday, 11-12
- ⇒ Actual time: 12-1 in the _Board_ room
- ⇒ General info for ham "public" for recruitment plus the raffle drawing

September Meeting
We decided to have a normal Membership Meeting on 18 September in addition to the HamXposition 2019 presentation. Location and presentation topic to be determined.

Technical Director's Report (Bob, K1IW)
Bob gave an extensive update to all of the recent happenings and future needs. (Note, status as of 22 August)
Recent Work Completed:
- Cleanup of Brookline, decommissioned white box PC
- Hopkinton Upgrade
- 147.27 Link Radio
- 927.700 IRLP audio
- MRW Main Router (fixed, then hit by lightning, then replaced!)

- Tower Replacement at MRE & Repaint
- MRW Repaint
- New Antennas at MRW
- North Reading – cellular modem failure
    - ⇒ *Voted: Replace failed North Reading modem ($85): moved; Bob, K1IW; seconded: Kevin, K1KWP; unanimous*
- No TX tone on 146.715
- No TX tone on 146.79

Still Pending
- Mendon controller upgrade — ready, waiting for access
    - ⇒ *Voted: Mendon controller upgrade ($455): moved; Bob, K1IW; seconded: Kevin, K1KWP; unanimous*
- No TX tone on 146.82 - parts in, need to go to Pru – may be a while
- Future of 224.88? – Deferred for later discussion

[Editor's comment: Most of this work was done by Bob himself. Next time you see him, thank him!]

Internet S-Com Command System (Bob, K1IW)
Bob gave a quick technical overview and status update. More to follow later.

September Newsletter –> August
Due to the need for a newsletter before HamXposition 2019, we decided to publish this newsletter early:
- Publication date: 26 August
- Article due date: 16 August
- Current articles "promised":
    - HamXposition 2019 preview
    - Membership meeting (18 September) announcement
    - June Business Meeting minutes
    - May Membership Meeting review (Hotspots)
    - President's Corner (Dave, N1DCN)
    - Repeater Update (Bob, K1IW)
- Other articles solicited

Treasurer's Reports (Kevin, K1KWP)
Given that we are only in the first month of the new fiscal year, there is nothing to report.

Meeting adjourned at 9:10 PM EDT

Summertime Repeater Improvements

Marlboro East (MRE) Painting Party

Thanks to Bob, K1IW, John, WA1MDD; John, KF1KI, and Bruce, KC1US

Marlboro West (MRW) Painting Party

[N1DCH Photos]

Shown in photo: John, KF1KI; Ron, KE3KK; John, WA1MDD; Charles, KC1JOU; and Dick, K1KMN
Not in Photo: Bob, K1IW; Dave, N1DCH

(Apologies if we missed anyone!)

Marlboro West (MRW)
220 Antenna Replacement

Thanks to Bryan, W1BYI; Bruce, KC1US; John, WA1MDD; Kevin, K1KWP; and the tower climbing crew from Barbrick Tower and Contracting, the 220 antenna on the Sligo water tower was replaced and the triband (6M / 2M / 70 cm) antenna was repaired.

The OLD configuration

The NEW configuration

[W1BRI Photos]

Upcoming MMRA Meetings

Note: Meeting locations and times are subject to change.
Consult the MMRA website for the most up-to-date information.
Teleconference numbers will be available one week before a business meeting—if you wish to attend, email contact@mmra.org.

Sunday, 8 Sept ~ Northeast HamXposition @ Boxboro   Noon

Wednesday, 18 September ~ Membership Meeting
Speaker: Larry Banks, W1DYJ
Topic: Two Ideas for Skyhooks
Location: New England Sci-Tech Inc., Natick

Wednesday, 16 October ~ Business Meeting
Location: TBD

Wednesday, 20 November ~ Membership Meeting
Speaker/Topic: TBD
Location: TBD

Wednesday, 18 December ~ Business Meeting
Location: TBD

Wednesday, 15 January ~ Membership Meeting
Speaker/Topic: TBD
Location: TBD

Wednesday, 19 February ~ Business Meeting
Location: TBD

Wednesday, 18 March ~ Membership Meeting
Speaker/Topic: TBD
Location: TBD

Wednesday, 15 April ~ Business Meeting
Location: TBD

Wednesday, 20 May ~ Annual Meeting & Elections
Speaker/Topic: TBD
Location: TBD

Wednesday, 17 June ~ Business Meeting
Location: TBD

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	W1DYJ	Larry Banks
Week 2	WA1JIM	Jimmy Devaire
Week 3	KC1CLA	Ed Curley
Week 4	K1KWP	Kevin Paetzold
Week 5	KB1OQA	Tom Turner

To connect using Echolink / IRLP during the Net:
- Echolink Conference *NEW-ENG2*
- IRLP node 4133

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

MMRA Leaders

Executive Board — Officers

President	David Hornbaker	N1DCH
Vice President	John Spencer	WA1MDD
Secretary	Jason Peardon	W1HFP
Treasurer	Kevin Paetzold	K1KWP
Clerk	Charles Miller	KC1JUO

Executive Board — Directors

Director »2020	Clark Conti	N1NVK
Director »2020	James Lee	N1DDK
Director »2021	Bob DeMattia	K1IW
Director »2021	Roger Coulson	WA1NVC

Technical Officer

| Technical Officer | Bob DeMattia | K1IW |

President Emeritus

Bob DeMattia   K1IW

Technical Officer Emeritus

Bryan Cerqua   W1BRI

Repeater Trustees

* Belmont 145.430	Ed Curley	KC1CLA
* Boston 146.820	John Mullaney	K1BOS
* Brookline 145.16	Joyce DeMattia	K1IWW
* Brookline Rcv 146.82	Bob Phinney	K5TEC
* Boston 927.0625	Rick Zach	K1RJZ
* Hopkinton 449.575	Bryan Cerqua	W1BRI
* Lowell 442.250	Vince De La Flor	K1LVF
* Marlborough 53.810, Quincy 146.670;		
	Bryan Cerqua	W1BRI
* Marlborough: 29.68, 144.390, 147.270, 223.940, 442.700 448.225, 449.925, 927.700 — all as W1MRA		
	Bill Northup	N1QPR
* Mendon 146.610	Kevin Paetzold	K1KWP
* N. Reading 146.715	Bruce Pigott	KC1US
* N. Reading 446.775	Larry Banks	W1DYJ
* Quincy 224.400	Bill Dunn	N1KUG
* Weston 146.790	Bob Evans	N1BE
* Weston 224.700	Eddie Mulhern	N1NOM

Additional, non-Voting

* Newsletter Editor	Larry Banks	W1DYJ
* Emerg. Coord.	Kevin Paetzold	K1KWP
*Pub. Serv. Coord.	Bruce Pigott	KC1US
* VEC Liaison	Bill Wade	K1IJ
* Net Manager	Larry Banks	W1DYJ
* Web Page Editor	Bob DeMattia	K1IW

* Appointed

MMRA VE Sessions

Check here for the schedule:
http://www.mmra.org/exam.html

Contact: Bill Wade, K1IJ   617-699-3670
Evenings 6 - 10 PM   Weekends 8 AM to 10 PM.

Contacting the MMRA

http://www.mmra.org/

Members: MMRA@yahoogroups.com
Officers: contact@mmra.org
Control Ops: control-ops@mmra.org

@mmraham

https://www.facebook.com/mmraham.

Calendar of Ham Radio Flea Markets & Gatherings

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

7 Sep	Windsor CT	VR+CMus
7-8 Sep	**Boxboro MA**	
	Northeast HamXposition 2019	
8 Sep	Ballston Spa NY	SCARA @FG
15 Sep	Cambridge MA	Flea at MIT
21 Sep	Alexander ME	StCVARC @ FARA
28 Sep	Brookline NH	NEARC
6 Oct	Queens NY	HOSARC @HOS
11,12 Oct	**Deerfield NH**	
	NEARfest XXVI @FG	

13 Oct	Meriden CT	Nutmeg @Sheradon
20 Oct	Cambridge MA	Flea at MIT
27 Oct	Hicksvile NY	LIMARC @LevitHall
2 Nov	Gales Ferry CT	TCARC @FireCo
2 Nov	Bourne MA	FARA @CC Voc Sch
7 Dec	Windsor CT	VR+CMus
18 Jan	Whitman MA	WARC @KoC
7 Mar	Chicopee MA	MtTARA @Castle
10,11 Apr	Lewiston ME	AARC @ Ramada
26 Apr	Thompson CT	ECARC @Raceway
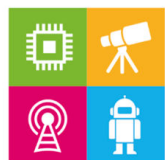
NEW ENGLAND SCI-TECH

New England Sci-Tech Inc is a new 501(c)(3) STEM education center, amateur radio training center, and maker space located at 16 Tech Circle, Natick. It is home to New England Amateur Radio Inc (NE1AR) and the youth radio club Sci-Tech Amateur Radio Society (STARS). NE Sci-Tech welcomes memberships and donations via www.NESciTech.org or www.NE1AR.org.

Directions to New England Sci-Tech Inc.
16 Tech Circle   Natick MA 01760

From the north: take Rt 95 or Rt 27 or Rt 495 south to Route 30 toward Wayland. Once in Wayland, turn South on Oak Street and in 1/2 mile look for Tech Circle on your left. Follow Tech Circle to the end.

From the south: take Rt 95 or Rt 27 or Rt 495 north to Route 9 toward Natick. At the Wellesley-Natick line, turn North on Oak Street and in 1/2 mile look for Tech Circle on your right. Follow Tech Circle to the end.

From the east or west: follow either Rt 30 or Rt 9 toward Natick, turn onto Oak Street at a set of traffic lights, and in 1/2 mile look for Tech Circle. Follow Tech Circle to the end.