



The Minuteman Repeater Association
A non-profit communications organization serving the public in times of emergency.



The Minuteman

Special Marathon Issue

Volume 43, Number 5

May 2014

Membership Meeting ~ Wednesday, May 21 ~ 7 PM

Annual Meeting & Elections

Officers Report to Membership

**Northborough Public Library, 34 Main
 Street, Northborough**
 Talk-in: 147.27

NOTE: There Will Be Door-Prizes!

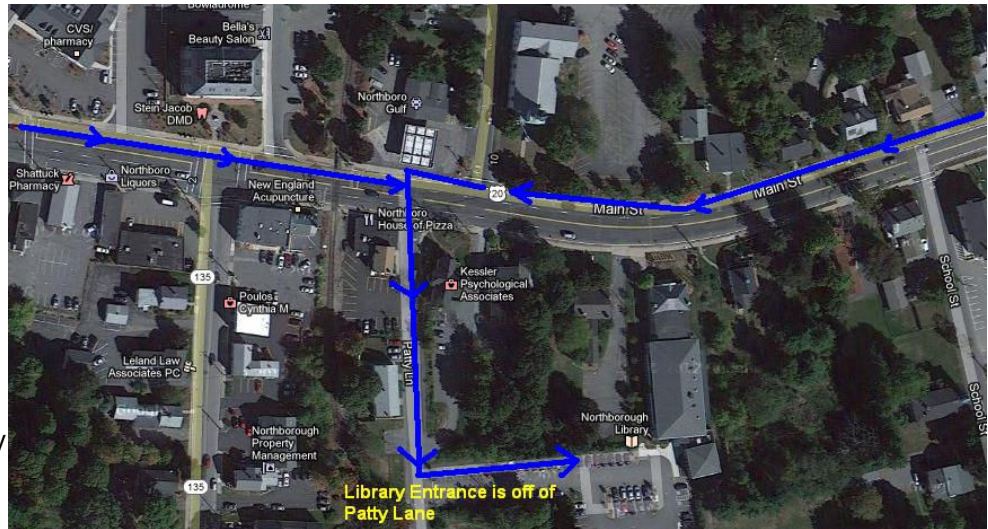
Slate of Officers

President	Bob DeMattia	K1IW
Vice President	Steve Telsey	N1BDA
Secretary	John McGovern	W1JMC
Treasurer	Kevin Paetzold	K1KWP
Clerk	Bob Evans	N1BE
Director »2016	Clark Conti	N1NVK
Director »2016	Mike Neilsen	W1MPN

Directions to The Northborough Free Library

Directions from I-495:

- From I-495, take Exit 24B which is Rt. 20 West toward Northborough.
- Follow Rt. 20 West about 3.5 miles, into the center of Northborough..
- Opposite the Gulf Station on the right, turn left into Patty Lane.
- The Northborough Free Library parking lot will be on the left.



Also check: <http://northboroughlibrary.org/northborough/hours.asp>

LIBRARY PARKING

Patty Lane is right across from the Gulf station. Follow Patty Lane to the library parking lot.

The red brick building next to the library has a tempting driveway, being right next to the library, but it is private property. Please respect the owners' property, and use the library lot. Additional parking is available on the corner of Hudson and Pierce, or at Town Hall.

Traffic exiting Patty Lane should stay to far right, even for left turns, to avoid traffic turning in. The lane closest to the pizza shop is for INCOMING traffic ONLY from Rt. 20 eastbound.

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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>.

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 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. Measures are being taken to make audio recordings of repeater activity.

Repeater and Frequency Information

Check <http://www.mmra.org/repeaters/index.html> for up-to date info

Band	XMTR Location	Freq	PL	Call	Linking	
					To Hub 1	To Hub 2
MMRA Voice Repeaters						
10m	Marlboro	29.680	131.8	W1MRA	PTL	PTL
6m	Marlboro	53.810	71.9	W1BRI	PTL	PTL
2m	Brookline	145.160	—	W1MRA	D-Star	
	Belmont	145.430	67.0	N1DDK	—	—
	Mendon	146.610	146.2	AE1C	FTL	PTL
	Quincy	146.670		W1BRI	PTL	PTL
	Burlington	146.715		KC1US	PTL	PTL
	Weston	146.790		N1BE	PTL	PTL
	- also C4FM Digital				Not linkable until 14 June	
	Boston	146.820	146.2	K1BOS	FTL	PTL
	Remote receive in Brookline Boston: PLin = 127.3					
	Marlboro	147.270	146.2	W1MRA	PTL	PTL
Remote receive in Hopkinton: PLin = 127.3						
1½m	Hopkinton	223.940	103.5	K1KWP	PTL	FTL
	Quincy	224.400		N1KUG	PTL	FTL
	Weston	224.700		N1NOM	PTL	FTL
	Marlboro	224.880		W1MRA	PTL	FTL
70cm	Lowell	442.250	88.5	K1LVF	FTL	PTL: 446.775
	Weston *	442.700		W1MRA	Network Hub 2 (PTL to Hub 1)	
	Burlington	446.775		W1DYJ	FTL	PTL
	Southboro	449.575		W1BRI	PTL	PTL
	Marlboro *	449.925		W1MRA	Network Hub 1	
33cm	Boston *	927.0625	D244	K1RJZ	PTL	PTL
	Marlboro *	927.700		W1MRA	PTL	PTL

MMRA Other Systems

Marlboro		144.390	none	W1MRA	APRS Digipeater
???		145.630	146.2	W1MRA	Fox Box
*Internet	HUB1— 449.925: IRLP node 4133; Echolink				
	HUB2 — 442.700: IRLP node 4136; Connected to 220 Reflector 9124 on Tuesdays				
	927.0625: IRLP node 4977			Normally linked to the NE900 Reflector, 9125. Linked to MMRA via IRLP for the TIAOS net. Normally linked together.	
	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.

Reduced Antenna Height

Off the Air

April Business Meeting ~ Bob Evans, Clerk, N1BE

The MMRA Board met for a business meeting at 7PM on April 16 at the headquarters office of Stratus Technologies in Maynard. K1IW, KB5JR, W1DYJ, N1NVK N1BDA, W1MPN, N1DDK and WA1NVC were in attendance.

Bob, K1IW discussed a Treasurer's report that was prepared by Kevin, K1KWP in advance of this meeting. We reviewed the income, treasury balance and expenses with projections to the end of the fiscal year. We also reviewed electricity consumption at QCY and MRW, the two sites where the MMRA pays for power.

The board appointed James, N1DDK to be the trustee of the 145.43 MHz repeater in Belmont.

The Board approved an election slate of the current officers and directors whose term expires in May 2014 to be nominees for the election at the annual meeting.

We had a general discussion of repeaters and the status of the MRW site. We are still awaiting approval from the City of Marlborough to move the MMRA antennas back onto the tower at MRW.

KB5JR agreed to investigate alternative sites that might give better coverage in NW Middlesex

county. The thought is to locate an MMRA 2-meter repeater and KB5JR's UHF machine at such a site.

K1IW discussed the need to update the 146.79 repeater equipment at Weston. K1IW has obtained a beta test unit of a Yaesu DR-1 Fusion repeater that we considered using on a temporary basis at Weston. (The DR-1 was on display at our meeting; it can operate in analog and/or digital mode.) Using the DR-1 at Weston would allow 146.79 to stay active but not linkable while the MMRA equipment is updated in K1IW's shack. Weston 220 would also be off the air during this time. Bob predicts Weston would be back to full functionality before the end of June. Although not voted on, the consensus was to proceed with this plan.

Dave, KG1H suggested the MMRA mission statement on our web site, "a non-profit communications organization serving the public in times of emergency", be revised to be a more comprehensive representation of our role. Bob, K1IW will solicit input on improvements to this MMRA mission statement.

The meeting adjourned at 8:15 PM

President's Corner ~ Bob DeMattia — K1IW

I'm taking a short break after the Marathon to compose my "President's Corner" for this issue. Sunday, I'll be up at 5AM and headed into Boston to be a radio volunteer for the Walk for Hunger charity walk. I guess it's fitting that this corner be included it what is turning out to be our public service issue. This year's Boston Marathon was an exciting year—in a good way. The radio team increased from its typical 240 to nearly 300. The event ran smoothly and radio amateurs performed their duties with efficiency and professionalism. Whether one actively participates in an event, or contributes financially by being a member of MMRA, everyone plays a vital role in keeping

MMRA relevant in this time of laptops, cellphones, and tablet devices. As our calendar year comes to a close, I want to thank everyone that has continued to support the club through membership. Dues is the primary income source for the club—it pays the electric bills in Marlborough and Quincy, the internet bills, and the cost of repair and upgrades to equipment. I wish you a great summer and hope to see your continued membership next year.

**Next MMRA Business Meeting:
Wednesday 18 June, 7PM
Stratus, Maynard**

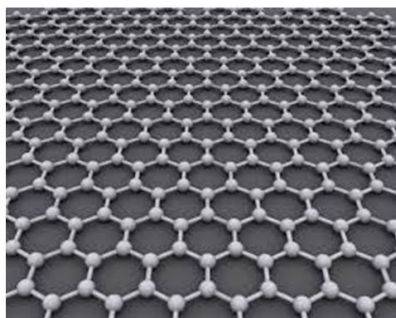
MMRA March Membership Meeting A Peek Into the World of Nanotechnology

Paul Anzalone, N1PA ~ Nanocorp Technologies

This presentation discussed where we're headed in the future with Graphene and Carbon Nanotubes (CNTs). If you didn't attend, you missed one of the most interesting programs in a long time. Just a hint of the presentation is below.

Graphene

1 Layer thick of Carbon Atoms

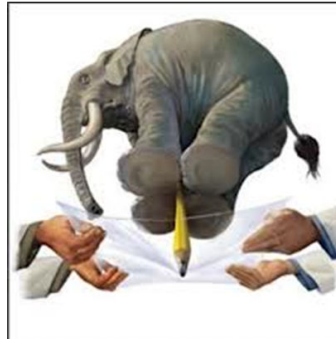


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A Visual to Remember

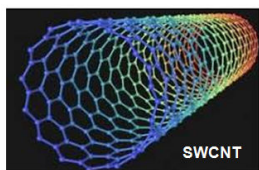
Graphene is the strongest material known to science today.



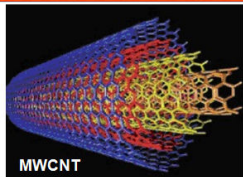
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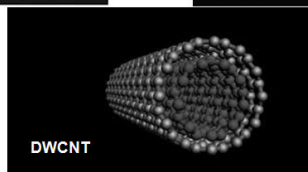
Carbon Nanotubes Come in Different Flavors



SWCNT



MWCNT



DWCNT

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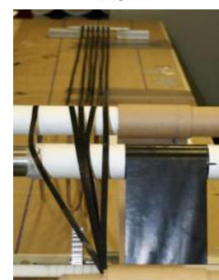
Conductive Yarns Combined With CNT Shielding Tape Provide Total Solution For Cable Applications

Yarns



1 Kilometer 24 gauge CNT core conductor

Tapes



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That Are Up To 70% Lighter Weight With Significant Energy Savings Potential

Up To 70%
Lighter Weight



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Summary

Why are CNT's gaining so much popularity?

- Light Weight
- EMI Shielding
- Conductive
- Temperature Stability
- Strong
- Fire Proof

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Boston Marathon 2014 Report

Rob Macedo, KD1CY — SEC for the ARRL Eastern Mass section

The 2014 Boston Marathon was run under tight security and other changes in the wake of the 2013 Boston Marathon bombings. Over 300 Amateur Radio Operators volunteered at this year's Boston Marathon on a beautiful New England Spring day. The Boston Marathon is one of the biggest public service events for Amateur Radio Operators in New England.

"We received a fantastic showing of volunteer support across the start, course and finish line from the Amateur Radio community in the wake of the 2013 bombings and shows that 'Boston Strong' remains a rallying cry after last year's tragedy. There are many stories where all these volunteers gave valued contributions and we thank every single Amateur Radio volunteer for all their help and support. I also wish to thank my assistant, Jim Palmer-KB1KQW for all his help in supporting me this year as an Assistant Course Coordinator, Paul Topolski-W1SEX for finish line operations and Kevin Paetzold-K1KWP for supporting start line operations" said Steve Schwarm-W3EVE, Boston Marathon Course Coordinator.

One of the unsung heroes of the Boston Marathon Amateur Radio Communications Team is Bob DeMattia-K1IW who is the mastermind behind an elaborate net control setup that is just off the course path and has line of sight to Boston. Through a combiner and utilization of various frequencies across 2-meters, 220 and 440 MHz, up to 10 Amateur Radio setups were provided at the net control location with multiple antenna setups. Bob has done this setup work for many years. He also created and the Marathon Amateur Radio Communications team has for years, utilized an online registration form and database for Amateur Radio volunteers across the start, course and finish line. For this year, a new challenge developed where one of the 2-meter repeaters for course operation went down less than 24 hours from the start of the Boston Marathon. Bob responded to the situation and resolved the repeater issue which turned out to be a bad power supply and had the repeater back into operation Monday Morning just after 9 AM as the marathon was starting.

"We can't forget the efforts of people like Bob-K1IW who are responsible for the highly technical work in maintaining the various Boston Marathon repeater, net control setup and online registration system that we utilize" Schwarm said.

For this year, Amateur Radio had a stronger presence at the Massachusetts Emergency Management Agency (MEMA) State Emergency Operations Center (SEOC). At the SEOC, a Multi-Agency Coordination Center (MACC) was setup for the Boston Marathon. The SEOC was on the air under call-sign, WC1MA, and worked closely with the Bos-

ton Marathon Amateur Net Control Center, the BAA Operations Center which was setup at the Boston Public Library and the Red Cross Disaster Operations Center (DOC) in Cambridge.

"I have participated in the Boston Marathon in varying capacities from staffing a first aid/medical tent on the course to the net control center to shadowing the Red Cross Medical Coordinator at the 2013 Boston Marathon. For this year, I was at the state EOC MACC with MEMA Region 1 Communications Officer, Terry Stader-KA8SCP, where we provided assistance for the Amateur Radio operation from the SEOC and provided situational awareness and an alternate communications path to the marathon for MEMA Headquarters" said Rob Macedo-KD1CY, Eastern Massachusetts ARES Section Emergency Coordinator.

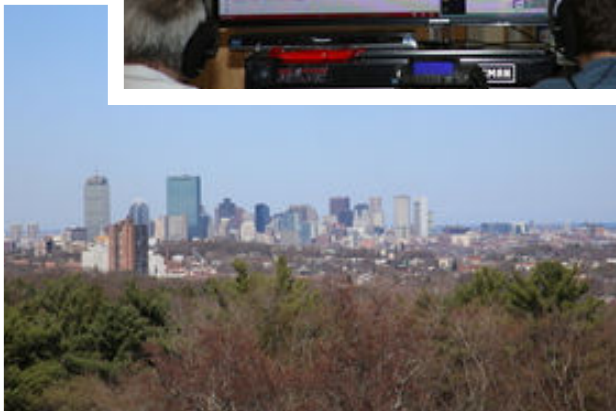
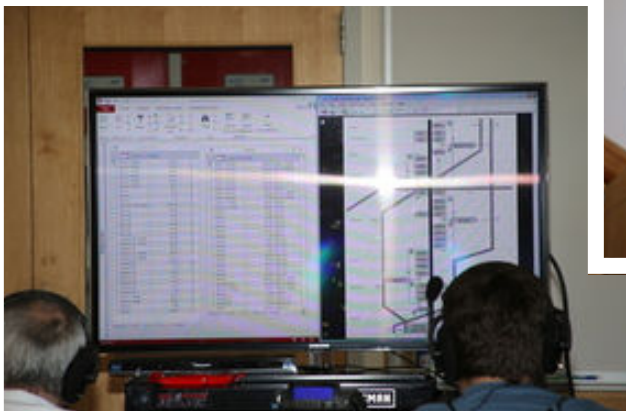
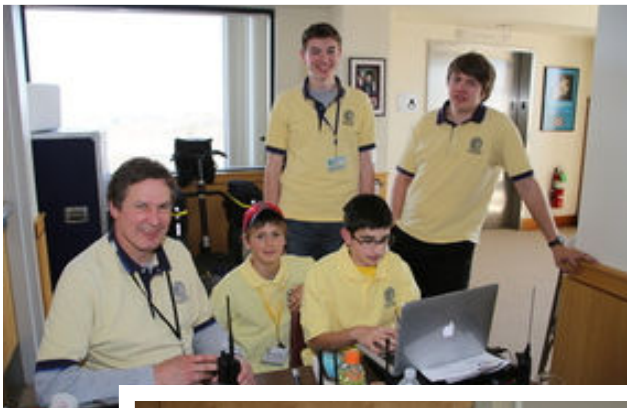
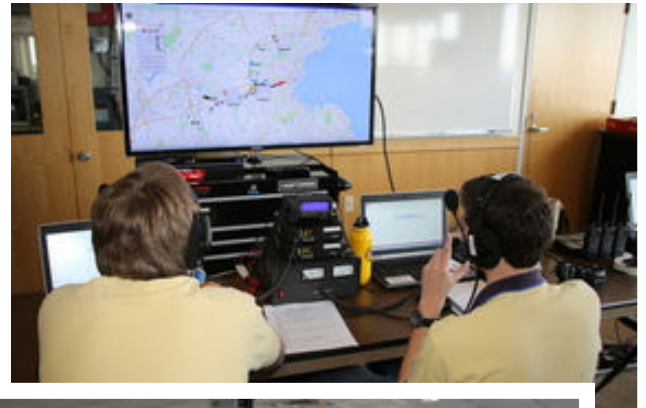
For this year, the ambulance request process was changed and ambulance requests were relayed by Amateur Radio Operators into the State Emergency Operations Center using a UHF Commercial radio system and Amateurs talked directly with dispatchers from state emergency management. This was done to consolidate the ambulance requests into the state EOC. Amateur Radio backed up the communication on the commercial network for ambulance requests. This meant Amateur Radio Operators had to learn very quickly this new UHF commercial system that utilized digital TRBO (turbo) technology.

"The changes in this area saw a few glitches but overall, ambulance requests got handled in a timely fashion and were still done by Amateur Radio Operators over the separate network. Also, all logistical supply and medical bus transports remain over the Amateur Radio system" Macedo said.

Finish line coordinator Paul Topolski-W1SEX, who was stationed at the BAA Operations Center requested assistance from the MEMA MACC to move sanitation vehicles away from the Trinity Place entrance for the medical and elite runner transportation vehicles. The MACC handled the request through Boston Police Department representatives. A couple downed runner ambulance request calls were also relayed from the BAA Operations Center.

From the course, a total of 72 ambulance requests were executed with runners sent to hospitals. Temperatures that approached 70 degrees in Boston contributed to a higher number of ambulance requests for this year from runner related medical issues. At one point, the finish line medical tents were near 80% capacity at the height of the marathon. All marathon operations secured between 7 and 745 PM as the last course first aid and finish line operations closed down for the day.

Boston Marathon Net Control Photos by Bruce Tinkler, N9JBT



Boston Marathon 2014 – THE START LINE

Tom Turner, KB1OQA

I've worked the Boston Marathon for the past eight years in various capacities; street assignments, the medical supply truck, and, for the past two years, the Start Line in Hopkinton. This year, though, was quite a change from previous Marathons due to the unfortunate incidents that took place at the Finish Line in 2013. Security along the entire course was greatly increased, and the Starting Line was no exception.

There was a very strong Public Safety Presence in Hopkinton, with over 170 Police Officers from Federal, Local, and State agencies on-site. This group included not only uniformed officers, but plain-clothes personnel as well. Surveillance cameras had been installed to monitor activity, and many more barricades had been installed to restrict access to certain locations for the protection of runners and spectators alike. Folks arriving to watch the Marathon were checked, and new guidelines as to what one could or could not bring with them were in place.

I awoke at around 3:00 AM, left my home around 3:45 AM, arriving in Hopkinton at about 4:15 AM. I proceeded to the Common to meet with my Team Captain, Kevin, K1KWP. After being provided with a set of credentials and a Marathon Jacket, I helped him set up his area in the Information Tent, which was our base of operations.

Our communications were for the most part on simplex VHF frequencies with a repeaterized UHF "Town-Wide" frequency in case of any problems. There were 34 Hams on the Start Team this year. Some were stationed at two large parking areas away from the course; spectators were shuttled by bus to the center of Town to watch the race. Hams were also stationed at the Athlete's Village.

My original assignment was to "shadow" the Corral Captain and provide radio communications as needed. This is the person who lines up the runners on Rte-135 and coordinates the start. There were 36,000 runners this year, and the starts are staggered (There were seven this year) with a break of 10-15 minutes between each to provide order to the race. I was later reassigned with nine other Hams to the "Down Course Safety Team." In this role, the group covers the first 2,000 feet of the route just East of the Start Line headed towards Ashland. We make sure that there are no obstructions in or on the course and that it is safe for the runners.

Once the Marathon starts, it goes fairly quickly. I was finished by around 12 Noon.

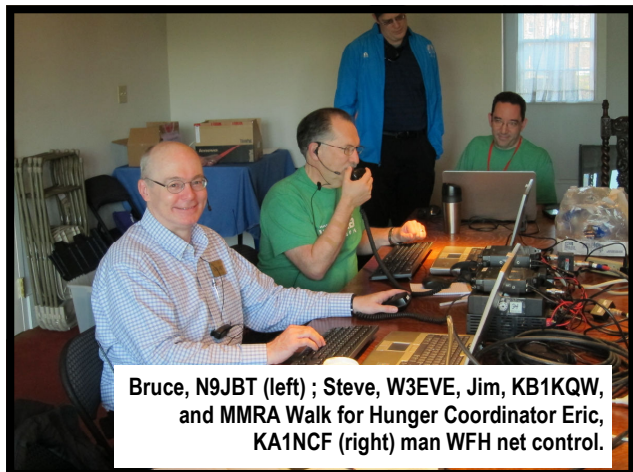
For any Ham Radio Operator that's considering working at the Marathon, I'd recommend that you do so. There are many and varied assignments; Medical and Water Stations; the Medical Supply Vehicles that deliver and pick up needed first aid supplies, Medical Sweep Busses, and the coordinators and backbone of our entire communications operation during and after the Marathon – Net Control. I can guarantee that, whatever your duties, you'll have a great time !!

Read what the ARRL said about the Marathon!

<http://www.arrl.org/news/more-than-300-amateur-radio-volunteers-support-2014-boston-marathon>

Amateur Radio Supports Walk For Hunger ~ Bob DeMattia — K1IW

Amateur radio has been provided communications for the Walk for Hunger since the 1980's - and this year is no exception. The Colonial Wireless association was the first group to support this event. It was passed on to the Crocker Public Service Group in 1994, and MMRA inherited it when it acquired CPSG in 2007 - making it the 7th year for MMRA. This year, amateurs helped coordinate the transportation network that ensured injured or tired walkers could safely return to the finish line.



Bruce, N9JBT (left) ; Steve, W3EVE, Jim, KB1KQW, and MMRA Walk for Hunger Coordinator Eric, KA1NCF (right) man WFH net control.



MMRA President Bob, K1IW and daughter Julia, K1JLA, do a little non-radio water station support at checkpoint 5

What is C4FM

...or Weston 146.790 is now a Yaesu dual mode Analog / FM

It could be a 1x2 callsign for an amateur radio operator licensed in Cyprus, but in this case it's not. It's a way to describe the modulation system used by Yaesu on its new line of digital radios. Yes, instead of following along the lines of DStar, DMR, or P25 - the most prevalent digital modes, Yaesu decided to do it their own way. "C4FM" is not entirely new - it's actually the same type of modulation used for P25 Phase I. However, C4FM does not completely describe the modulation technique. Although P25 and Yaesu both use "C4FM", they are not compatible. MMRA is participating in the Yaesu "System Fusion" test and is currently operating a Yaesu DR-1 repeater on 146.79 in Weston. This repeater is "dual mode" and will repeat whatever type of signal it hears. This allows it to continue to operate as an analog repeater, while letting people with one of the two new Yaesu radios - the FTM400DR mobile or the FT1D handheld - to communicate digitally. Because of this change, '79 is currently not linkable. Linking is planned to be restored by June 14th when the 7K controller modifications are complete. In the meantime, signal reports are welcome on both how the new repeater "gets out" and more importantly how it receives.



PART Members Help Make Half Marathon in Ashland a Success

Lyman Smith, W1LKS and Mark Richards, K1MGY (Photos: W1LKS)

(Special to the Minuteman)

The Marathon Park Prep race was held on Sunday, 16 March, and several PART (*Police Amateur Radio Team of Westford*) members participated. Organized by Mark Richards, K1MGY, and David Wolfe, KG1H, under the auspices of the **Minute Man Repeater Association (MMRA)**, this 13 mile race hosted some 700 eager runners.

Ashland served as the original starting point of the Boston Marathon, with the first race on April 19, 1897. The starting line was eventually moved to Hopkinton in 1924 to meet the Olympic standard length of 26 miles. The Town of Ashland and civic groups have both worked to preserve their bit of Boston Marathon history. With the Marathon Park and recently-approved expansion plans including a Marathon Museum, Ashland intends to promote and enjoy their unique place among running enthusiasts.

Last Fall the Ashland Sporting Association hosted a half marathon event and Amateur Radio played a public service role for the first time. The event organizers took notice. This year our work was expanded considerably.

A larger 16-person team was formed, training materials were created, a communications plan developed, and it all came together starting at 0830 – sharp. Training materials included a communications plan, a detailed assignment and resource document, and supplementary training material with topics common to this type of public service work.

On event morning a briefing was conducted which introduced each volunteer, summarized the key procedures, what volunteers might expect during the event, last minute



Left to right: KC1BGT, KG1H, K1MGY, KB1WKI and KC1ACV at pre-event briefing.

changes, and Q&A. This was vital, as it was important to form a unified team bound to one cause: safety. Our team came through in stellar fashion, reporting potential dangers along the race route, and along with Police, Fire, EMT, and event staff, helped to seal the safety envelope.

Thirty degree temperatures and 15 Mile per Hour winds may have been appreciated by the runners. For volunteers, the cold was something to be endured. Many shivered, longing for warmer venues that the bright sunshine of Spring will bring. The team started on time, was fully prepared, and demonstrated an eagerness to serve and participate that cold and wind was not about to overcome.

Returning from last year's participation in the Cystic Fibrosis Foundation's Cycle For Life event, Chris Handwerker, KB1WKI who held the tactical assignment **WATER 3**, assisted with the day's only medi-

cal call, a runner who had difficulty breathing. On scene, the Ashland Police dispatched an ambulance, and Chris made sure the Event Manager was made aware of the runner's BIB number and status through the communications net. Not to be deterred, the participant's composure was regained and, much to the surprise of all, she re-joined the race.



Chris Handwerker
KB1WKI, WATER 3

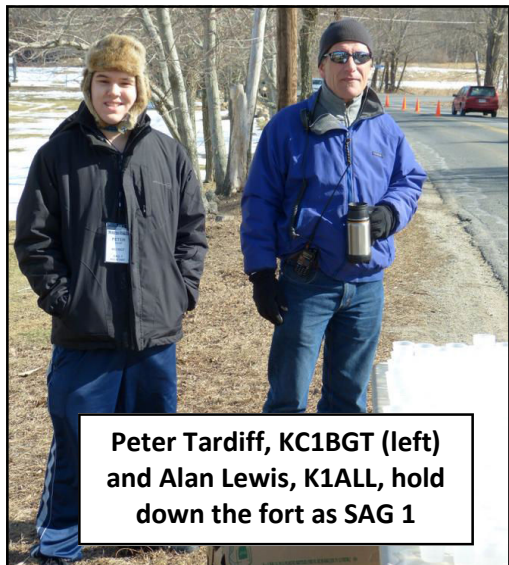
There were 5 water stops along the route. Having a northern and southern component, the course traversed a business district, busy intersections, State roads, and rural lanes, all contained within Ashland proper. The cold weather, number of participants, and course length necessitated a Medical tent at the finish, SAG (Support and Gear) units to provide non-medical transport to racers who decided to stop before reaching the end, an Amateur Radio operator at each of the 5 water stations, one at the MEDICAL tent, another serving as the START/FINISH line contact, an Event Manager Liaison, and the communications control point, NET.

Two experienced SAGs were recruited for this event. PART member Alan Lewis, K1ALL, served as **SAG 1**, with Gary Schwartz, N1ZCE, in **SAG 2**. Each **SAG** unit consisted of a driver and a navigator/assistant, both hams. This freed the driver to remain "heads up", while the navigator/assistant maintained awareness of location, direction of travel, and

PART Members Help Make Half Marathon in Ashland a Success

(Continued)

handled the radio calls as directed. Into this role was assigned Jeff Marden, KB1TJI and Peter Tardiff, KC1BGT. The arrangement also served as training, and both Jeff and Peter



Peter Tardiff, KC1BGT (left)
and Alan Lewis, K1ALL, hold
down the fort as SAG 1

soaked it up. Notably, Peter's Amateur Radio license was newly-minted; just one week old. Both gave stellar service, and their transmissions, consistent with the entire team, were crisp, unambiguous, and carried a satisfying professional tone.

PART members Lela Smith, KC1ACV, and her OM Lyman Smith, W1LKS, took on the unique tactical calls **PHOTO** and **ROVER**. **ROVER** was established to provide general transportation for volunteers. **PHOTO** served to document the event with both still photos and a few videos. Although **ROVER** was never called into service, the role of Amateur Radio self-promotion was met in extraordinarily complete fashion by **PHOTO**. The first time for such a role in events I've managed, it will be included in future. Our Amateur Service can be well-served through public relations and education. Thanks to both Lyman and Lela for holding up so well in the freeze.

Experience suggested that we prepare for personal contingencies – operators who might have to cancel at the last minute, or who need to respond to a family emergency – and so two additional units were assigned in the role of **READY ALERT**. Experienced operators were selected for these unenviable positions (being on stand-by) and both ended up providing helpful, and quite vital, service.

Jeff Pinterparsons, W5UVO, **READY ALERT 1**, took on the role of "scribe" for the **NCS**, K1MGY (your author). This was extremely valuable as your author's ability to juggle multiple issues at one time is not be as sharply tuned as it was 20 years ago. Having Jeff's impeccable handwritten log at the ready grew to be an essential I could not (and will not ever) do without. Jeff also took on the **NCS** role occasionally, for every task should provide both service and training opportunity. Jeff followed the script well and has a future in the **NCS** role if he might lean in that direction.

READY ALERT 2 was filled by Jay Lewis, KB1OZP. Early in the event, Jay assumed a new tactical call **SAFETY SWEEP 1**. This role was created to provide relief to the **SAG** units and to increase coverage. Jay attended to the event finish with multiple trips back and forth along the end of the course, identifying and accompanying the last runners, just as he has for many years as **SAG** for the MS Society's cycling events. As **SAG** and **SAFETY SWEEP** coverage was so complete, the race organizers extended the "hard stop" by 30 minutes, allowing stragglers to enjoy an officially-sanctioned finish line experience. It occurred that our team had occasion to make tactical decisions on the spot, and this is just the way I like it. Direct coordination with the Event Manager Liaison (tactical call sign **EM**), David Wolfe, KG1H, afforded an efficient use of resources. The role of **NCS** was to manage the communications net, help maintain situational awareness, lead units through procedures and requirements, and share a role in maintaining safety. Resource use was in the hands of the **EM**, right where it belonged.

David did double-duty, serving as a **SWEEP** unit at the conclusion of the event. He checked the entire course for stragglers and accounted for two of the three participants transported by the **SAG** team. Small numbers, but those runners really appreciated a warm ride to the end. David's coupling with the organizers helped to communicate the value of trained and managed Amateurs in this role.

Just as the day began we were informed that two roving EMT units planned for the course were unable to provide service. This put an emphasis upon the EMT team at the finish line, and added weight upon the shoulders of PART member Tim Pandiscio, W0TJP, tactical call sign **MEDICAL**. Tim quickly established excellent rapport with the EMT team, and as a result "they handed me one of their radios," he said, "which gave us immediate access to the medical team". This level of trust and cooperation is, in my experience, a rare and beautiful thing. Amateur Radio as a public service was well represented in this instance.

From start to finish this event was cold, but fun, and had potential for difficulty but turned in a stellar safety performance that might be the envy of any similarly-sized event. I believe it is no boast to suggest that Amateur Radio in an organized, managed, and coordinated fashion, contributed to such a positive finish. As we gain even more experience and take on increasingly complex tasks, I believe this event, among so many others where Amateur Radio is serving, represents a very good start. Thanks to every member of our team for making it so.

Upcoming MMRA Meetings

21 May ~ Membership Meeting
Annual meeting & Elections
Northborough Public Library

18 June ~ Business Meeting
Stratus, Maynard

16 July ~ Summer Get Together
Location TBA

20 August ~ Business Meeting
Stratus, Maynard



Is this the future of Sligo?

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 TIAOS Net. Keep up with what's happening in the MMRA and ask your ham related questions.

Want to try your hand at Net Control? Contact me at W1DYJ@mmra.org – we have a script you can use.

Current Net Control Operators:

Week 1	WA1JIM	Jimmy Devaire
Week 2	W1DYJ	Larry Banks
Week 3	KQ1Y	Tim Wortley
Week 4	K1KWP	Kevin Paetzold
Week 5	W1DYJ	Larry Banks

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)

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

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

Membership Meeting ~ Wednesday, March 19 ~ 7 PM
Annual Meeting & Elections
Northborough Public Library, 34 Main Street, Northborough
Talk-in: 147.27

NOTE: There Will Be Door-Prizes!

Calendar of Ham Radio Flea Markets

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

18 May	Cambridge MA	FLEA at MIT	6 Sep	Windsor CT	VR+C Mus
31 May	Goshen CT	SBARC @FG Rt63	7 Sep	Ballston Spa NY	SCRACES @FG
1 Jun	Bethpage NY	LIMARC @Briarcliffe	14 Sep	Newtown CT	CARA @TownHall
7 Jun	Hermon ME	PSARA @HS TG	20 Sep	Forestdale RI	RIAFMRS @VFW
7 Jun	Windsor CT	VR+C Mus	21 Sep	Cambridge MA	FLEA at MIT
8 Jun	Queens NY	HoSARC	27 Sep	Brookline NH	NEARC Antique
8 Jun	Fishkill NY	MtBARC @Corectional	5 Oct	Queens NY	HoSARC
15 Jun	Cambridge MA	FLEA at MIT	10,11 Oct	Deerfield NH	NEARfest XVI @FG
21 Jun	Newington CT	NARL @StMarySch	12 Oct	Meriden CT	Nutmeg @Sheraton
18,19 July	Hartford CT	ARRL Nat Conv 100th	18 Oct	Longueuil PQ	CRA-RS
20 Jul	Cambridge MA	FLEA at MIT	19 Oct	Cambridge MA	FLEA at MIT
9 Aug	Milo ME	PARC @AmLegion	25 Oct	Gales Ferry CT	TCARC Auction
17 Aug	Cambridge MA	FLEA at MIT	26 Oct	Hicksville NY	LIMARC @Levittown
24 Aug	Adams MA	NoBARC @BoweFld	29 Nov	Windsor CT	VR+C Mus

THE MINUTEMAN REPEATER ASSOCIATION

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Email: contact@mmra.org



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