The Minuteman Repeater Association

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

The Minuteman

Volume 50, Number 3 January 2021

Wednesday, 20 January, 2021 ~ Membership Meeting ~ 7:30—9:30 pm

CW DXCC in Six Months

Larry Banks, W1DYJ

Location: ***ZOOM — Members: login to the MMRA Webpage for the link***
Non-members: send an email to contact@mmra.org

In 2014, after 52 years as a ham and multiple attempts to learn CW, Larry finally decided to learn CW enough to not only use it, but to like it.

Starting with some history, this talk describes Larry's "project" to learn CW. It includes a CW training app, rig interfaces, a realization that CONTESTING was the best way to learn CW (and some contesting details), logging software, and finally Larry's results, both short term and long term.

Larry was licensed in 1962 as novice KN1VFX and became W1DYJ in 1966. He was an engineer and project manager developing diagnostic cardiac instrumentation for Hewlett-Packard Medical in Waltham and Andover from 1969 to 1985. He then assumed responsibility for establishing both the Cardiac R&D lab's CAD environment and the SW Testing and Quality group, along with ongoing responsibility for the Printed Circuit Layout group, the technical library, ongoing technical education, and ISO9001 as the R&D Section Manager for "R&D Process Improvement." Moving to HP Medical Education in 1993 to be responsible for technical and project management training, he became Agilent Technology's global program manager for their Learning Management System when Agilent split out of HP in 1999. He "retired" in 2005 and then consulted for Avago Technologies (now Broadcom) on eLearning technologies through 2012. Larry holds three degrees in EE from MIT. He spends his time chasing DX and contesting both in Woburn and at his second home in Maine, traveling with his wife Maren, and attending as many jazz and classical concerts as they can. (Well… we did back in the era now known as BC, now we do this on streaming video.) He is also the net manager and newsletter editor for the MMRA, publications editor for FEMARA, a member of the YCCC, and on the executive board for the Merrymeeting ARA in mid-coast (Brunswick) ME.

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About the Minuteman Repeater Association

MMRA Control Operators Responsibilities

https://www.mmra.org/MMRACOPolicy-March2019.pdf

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.

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	Hub 2
10m	Marlboro East	29.680	131.8	W1MRA	PTL	PTL
	Linked to 146.79: 9am-3pm every day					
6m	Marlboro East	53.810	71.9	W1BRI	PTL	PTL
	Remote receive Marlboro West: PL=100					
2m	Brookline	145.160	na	K1MRA	D-Star (REF050C)	
	Belmont	145.430	146.2	KC1CLA	PTL	FTL: DARI
	Mendon	146.610		K1KWP	FTL	PTL
	Quincy	146.670		W1BRI	PTL	PTL
	Nth Reading	146.715		KC1US	PTL	PTL
	Weston	146.790		N1BE	PTL	PTL
				Linked to 29.68: 9am-3pm every day		
	Boston	146.820		K1BOS	FTL	PTL
	Remote receive in Brookline Boston: PL = 127.3					
	Marlborough	147.270	146.2	W1MRA	PTL	PTL
1¼m	Marlborough	223.940	103.5	W1MRA	PTL	PTL
	Quincy	224.400		N1KUG	PTL	PTL
	Weston	224.700		N1NOM	PTL	PTL
	Burlington	224.880		KC1US	PTL	PTL
70cm	Lowell	442.250	88.5	W1MRA	FTL	PTL: 446.775
	Weston *	442.700		N1DCH	Network Hub 2 (PTL to Hub 1)	
	Nth Reading *System Fusion*	446.775	88.5 Linked 71.9 Local	W1DYJ	FTL [88.5]	PTL [88.5]
	Marlborough	448.225	na	W1MRA	D-Star (REF050C)	
	Hopkinton *System Fusion*	449.575	88.5 Linked 71.9 Local	W1BRI	FTL [88.5]	PTL [88.5]
	Marlborough *	449.925	88.5	W1MRA	Network Hub 1	
33cm	Boston *	927.0625	D244	K1RJZ	PTL	PTL
	Marlborough * PL out = 131.8	927.700		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 Connected to Echolink NEWENG2 conference (9127) for TIAOS net.	
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 "NEWENG2" node 9127 for the TIAOS net. Normally linked together.
927.700: IRLP 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.

President's Corner ~ David Hornbaker, N1DCH

Happy New Year 2021!

Join us Wednesday January 20th when Larry Banks, W1DYJ presents "CW DXCC in Six Months". This presentation covers Larry's adventures learning Morse Code and realizing that contesting was the best way to achieve his goal. This is an excellent presentation and I highly recommend it. Zoom conference information is available on the website (www.mmra.org) for members. Non-members can email contact@mmra.org for the information.

Join us Tuesday nights at 8:00 PM for our weekly Technical Information and Other Stuff (TIaOS) net. There will be a lively discussion on all sorts of HAM issues, including equipment, antennas, software, repeaters, and other stuff. The main purpose is to test our ability to link up the repeaters in case of an emergency, or to support some event like a marathon. You can also join via EchoLink if your radio is a little under the weather (or in my case too lazy to walk down to the shack). See below for more information.

You can find out more information about how and when the repeaters are linked on the website (https://www.mmra.org/repeaters/repeater_linking.html).

MMRA will continue to have virtual meetings due to the ongoing COVID-19 pandemic.

Due to COVID-19, we do not have access to some repeater sites. Repairs that cannot be done remotely, have been put on hold. Currently, this is preventing replacing a crystal on 224.880 in Burlington and repairing the link radio in Belmont.

73

Dave – N1DCH

The Amateur's Code

The Radio Amateur is:

CONSIDERATE...never knowingly operates in such a way as to lessen the pleasure of others.

LOYAL...offers loyalty, encouragement and support to other amateurs, local clubs, and the American Radio Relay League, through which Amateur Radio in the United States is represented nationally and internationally.

PROGRESSIVE...with knowledge abreast of science, a well-built and efficient station and operation above reproach.

FRIENDLY...slow and patient operating when requested; friendly advice and counsel to the beginner; kindly assistance, cooperation and consideration for the interests of others. These are the hallmarks of the amateur spirit.

BALANCED...radio is an avocation, never interfering with duties owed to family, job, school or community.

PATRIOTIC...station and skill always ready for service to country and community.

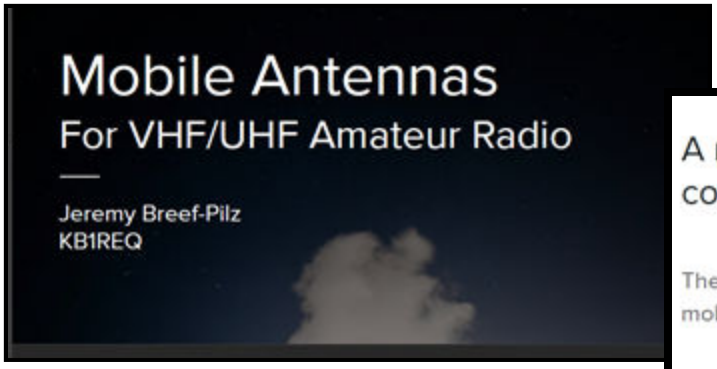
Paul M. Segal, W9EEA, 1928

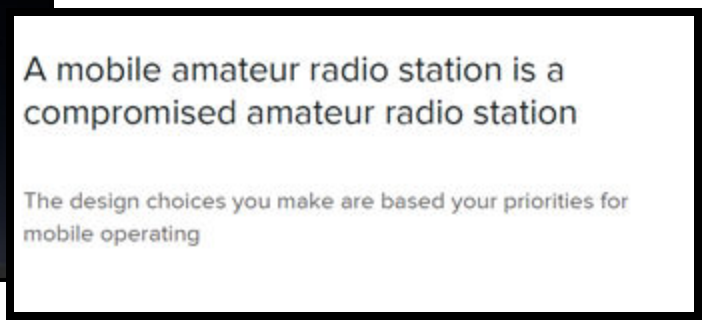
18 November 2020 Membership Meeting

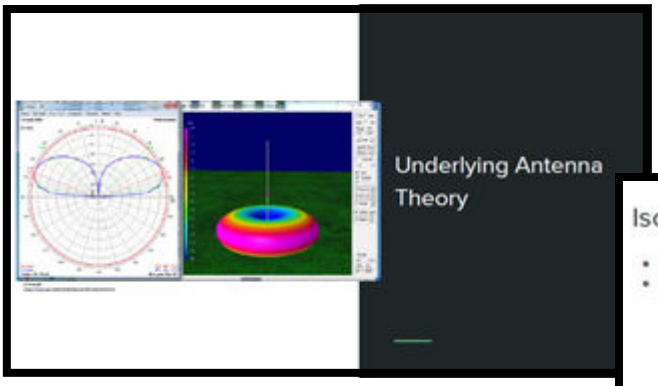
The November membership meeting was held via ZOOM. The Presentation:

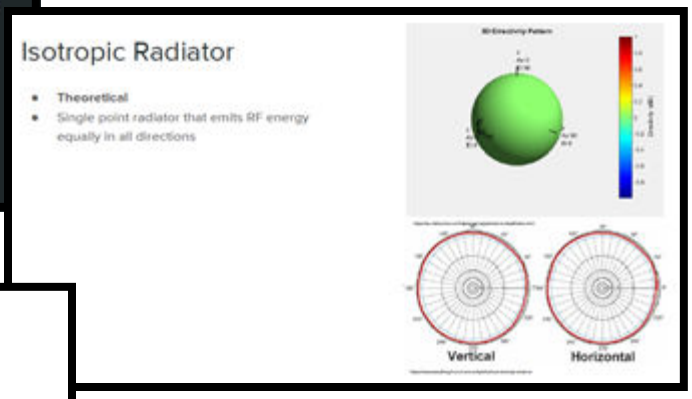
Mobile Antennas for Amateur Radio Operation

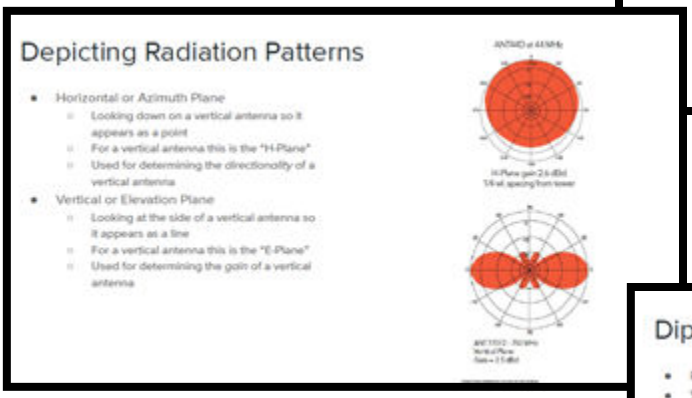
Jeremy Breef-Pilz, KB1REQ

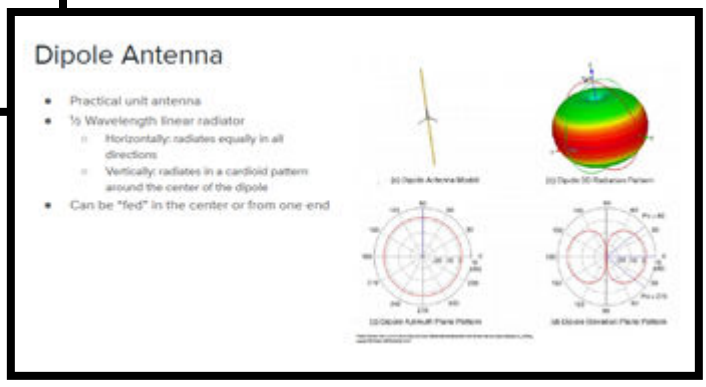




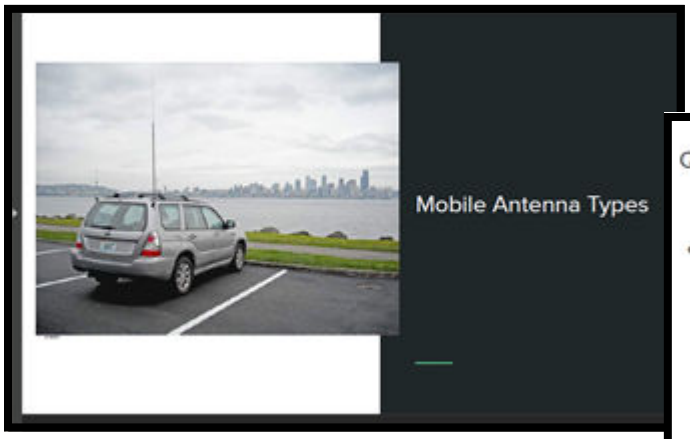


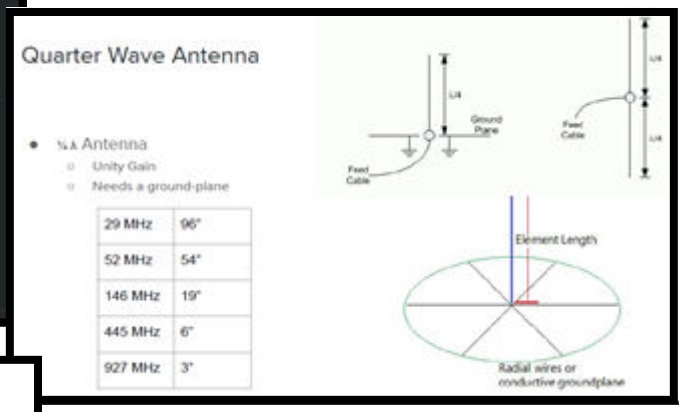


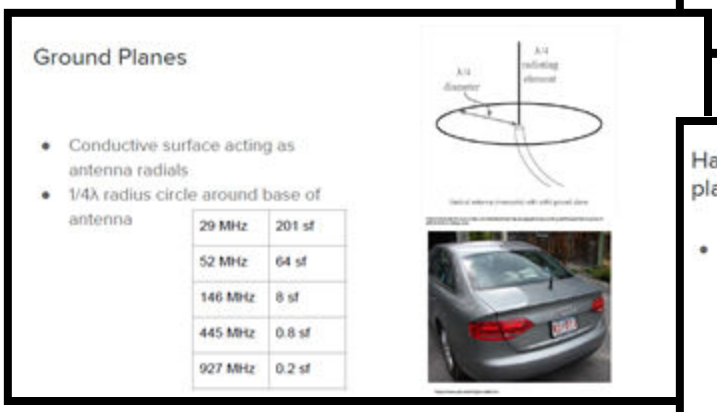


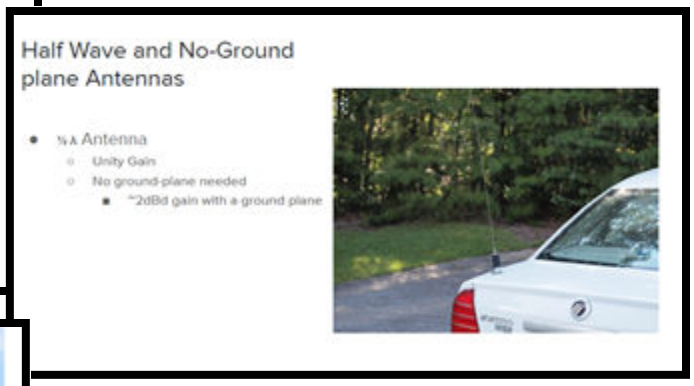


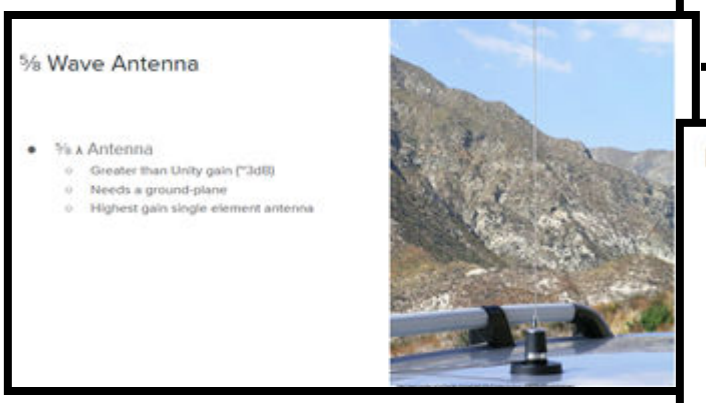
18 November 2020 Membership Meeting — continued

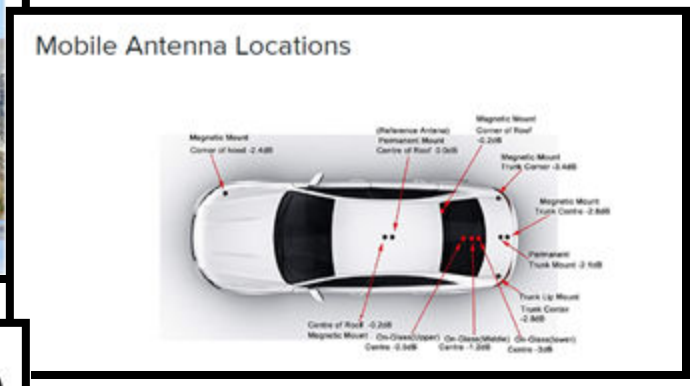












These are just a few of the slides from Jeremy's talk. ***"You should have been there!"***

I can send you Jeremy's talk; send a request to <w1dyj@mmra.org >.

Callsigns and Vanity Callsign History ~ Don Lacroix AA1FE

There was no licensing of amateur radio stations within the United States until the Radio Act of 1912. Until this time the early radio amateurs had allocated themselves callsigns in an ad-hoc fashion.

Before amateur radio licenses were introduce in the early days of wireless communications, few had any concept of how the technology would develop. Professionals and amateur experimenters alike were free to use the new medium of wireless as they wanted. No licenses were required. Initially governments had little concept of what wireless or radio was capable of, or what controls were needed. However, this soon started to change.

With stations needing to make contact via Morse Code in the early days, giving a full name was rather long winded and first names could be duplicated. The use of a callsign gave a nearly unique way of quickly identifying a station. Typically, about three letters were used, often the operator's initials.

Despite this, the Modern Electrics magazine published a listing of US stations and their callsigns (self-assigned) in a 1909 issue of their magazine. It listed the name and broad location of the station along with the call-letter which normally consisted of three letters, although a number had fewer letters, one having just the letter 'H' and others having a number as well like '3B'. It also listed the approximate wavelength on which they transmitted along with the spark coil length or the transmitter power.

However, as licenses became necessary stations were issued callsigns. These were initially issued by the US Department of Commerce. The Government Printing Office published annual lists of all US radio stations - amateur, commercial, and government stations all being listed together. Later, the US Commerce Department began issuing separate call books for amateur stations. Before there was any mandatory use of callsigns, their concept started to be introduced.

Prior to 1927, radio was regulated by the United States Department of Commerce. Commerce Secretary Herbert Hoover played a strong role in shaping radio. His powers were limited by federal court decisions, however; in particular, he was not allowed to deny broadcasting licenses to anyone who wanted one. The result was that many people perceived the airwaves to suffer from "chaos," with too many stations trying to be heard on too few frequencies. The Radio Act of 1927, enforced by the Federal Radio Commission by a five-person board, was given the power to grant and deny licenses, and to assign frequencies and power levels for licensees. The Commission was not given any official power of censorship, although programming could not include "obscene, indecent, or profane language." In theory, anything else could be aired. In practice, the Commission could take into consideration programming when renewing licenses, and their ability to take away a broadcaster's license enabled them to control content to some degree.

In 1934, Congress passed the Communications Act, which abolished the Federal Radio Commission and transferred jurisdiction over radio licensing to a new Federal Communications Commission, including the telecommunications jurisdiction previously handled by the Interstate Commerce Commission. Title II of the Communications Act focused on telecommunications using many concepts borrowed from railroad legislation and Title III contained provisions very similar to the Radio Act of 1927.

The recently enacted Vanity Call Sign program is not the first-time dormant call signs have been reissued. Did you know that call signs were commonly reissued as early as the 1920s? Many call signs have multiple owners who had their own unique QSL Card. Some call signs in the "QSL Cards from the Past" collection have more than 5 different owners. Here is this list: < http://www.oldqslcards.com/Master.pdf >

Over thirty-five years ago, it was possible to be assigned a preferential ham radio call sign if you knew the right people. Ham clubs, "deserving" amateurs ...even FCC officials who were licensed radio amateurs

Callsigns and Vanity Callsign History ~ Don Lacroix AA1FE, cont'd

were able to get a specific call sign or format. Back in those days call signs could be assigned manually. A phone call to the right official frequently resulted in a "good" call sign being issued at no charge. It was this way for years. It all came to a screeching halt in the mid 1970's when an FCC licensing official (who ended up going to federal prison) crossed the line by accepting money in exchange for granting a 1-by-2 call sign. The FCC responded to the scandal by eliminating all past station call sign policies and adopting a new Group Call Sign Assignment System. Effective March 24, 1978, all Amateur Radio call signs would be assigned "systematically" ...that is, in strict sequential order from predetermined call sign groups and blocks. Extra Class amateurs were entitled to Group "A" call signs which contained all 1x2, most 2x1, and most "A" prefixed 2x2 call signs. Advanced Class got Group "B" call signs containing most K, N, and W prefixed 2x2 call signs. Generals and Technicians were entitled to a Group "C" call sign; all 1x3 call signs beginning with K, N or W. The Novice Class (Group "D") contained most K and W prefixed 2x3 call signs. Group "E" call signs were to contain WC, WK, WM, and WT prefixed call signs for Races, Club, Military recreation and Temporary licenses. But Group "E" call signs were never implemented and to this day, these prefixes are not issued in a 2x3 format. All amateurs were allowed to keep their existing call sign ...a change would only be made if requested by the licensee.

Anyone upgrading or changing their radio district could either keep their present call sign or be assigned the next sequential one from the appropriate group. When all call signs are assigned from a specific group, the next assignment is made the next lower group.

To end this saga, neither the ARRL nor the FCC had advance knowledge of the short four-word "Amateur vanity call signs" that was added to the Schedule of Regulatory Fees at the last minute when President Clinton signed the Omnibus Budget Reconciliation Act (the official name of his Deficit Reduction Plan) into law on Tuesday, August 10, 1993 and with it, the provision for Vanity call signs became law (Public Law 103-66). A year later, December 23, 1994, the FCC Commissioners adopted final rules implementing vanity call signs in the Amateur Service, and since then the rules went through some minor tweaking (such as fees etc.) throughout the years to present.

It should be noted that when the vanity callsign became "official" in 1994 some hams were not in favor of the idea. It was said that you could tell how long a ham had been in the hobby by his/her callsign prior to the vanity callsign being official. For example, a W1### indicated an old-timer and probably got his/her call back in the 1930's-1940's. After the W1 calls (or block) was used-up then the K1### calls came out, dating from say the early 1950's. From there came the WA1### then WB1### (1960's-early1970's) and so on. Once the vanity callsign became law for amateur radio it did take a little time for those ham operators to warm-up to the idea of the vanity callsign, and eventually they did.

Sources: Wikipedia and other reliable/related amateur radio "public domain" sites and fact-checked.

An addendum from your editor: I received my original callsign, KN1VFX (novice) and shortly thereafter K1VFX (Technician) in 1962. In 1966 I wanted a station in Brookline while in college. Back then the rules were quite stringent. You had an operator license and a separate station license, so I had to apply for a second station license for a second station location. Apparently the FCC had run out of K1 calls and somehow I received reissued W1DYJ as my second station license rather than a WA1 call. (The distinction disappeared when your call was no longer association with your location.) When I moved permanently to Massachusetts I moved my operator license to W1DYJ. During one of my first MMRA meetings, probably in 1995 or 96, when I introduced myself as W1DYJ — and just like Don mentions above — one of the club old-timers, Frank, W1JDO (SK) said: *You're too young for that call!*

2020 Repeater Review ~ Bob DeMattia, K1IW

Despite stay-at-home orders, quite a few things got done at the MMRA repeaters sites this year.

On February 25th, the output tone encoder on the 146.82 transmitter in Boston was repaired.

On March 4th, MMRA members got together for what was to be the last MMRA group gathering for the year. We converged on the MMRA Weston site to clear out all the electronics junk which had been accumulating there for a long time.

On August 3rd, the CTCSS tone on the 146.715 repeater was repaired.

On August 31st, the new DR2X repeater was installed in Hopkinton.

On September 18th, the Mendon repeater controller was upgraded to an SCOM7330. With this upgrade, all MMRA repeaters can be controlled online.

On December 29th, the new Kenwood NXR-810 repeater was installed as HUB2 442.7 in Weston.

This last item makes the HUB2 installation almost identical to HUB1. If you haven't used HUB2, give it a try. Like HUB1, it has an EchoIRLP node which members can access.

What's on deck for this year? **First, the Quincy repeater which failed in November was reinstalled shortly after New Years and is back to normal.** **(See page 10.)**

Next, we have the two repairs pending from 2020 - repair of the Belmont 145.43 link radio and repair of the Burlington 224.88 receiver. Both of these projects are on hold due to COVID restrictions making their sites inaccessible.

16 December 2020 Business Meeting — Minutes

The meeting was brought to order at 7:34 by President Dave, N1DCH, via ZOOM

Present:

- K1IW, Bob DeMattia, Technical Officer, Director
- K1KWP, Kevin Paetzold, Treasurer
- N1BE, Rob Evans, Director
- N1DCH, Dave Hornbaker, President
- N1DDK, James Lee, Director
- N1NVK, Clark Conti, member
- W1DYJ, Larry Banks, Trustee
- W1HFP, Jason Peardon, Secretary
- WA1MDD, John Spencer, Vice President
- WA1NVC, Roger Coulson, Director

Old Business

- **W1BFM** donation update:
  - Most stuff has been sold. Current numbers: Gross ~$1300, Net ~$900
  - *Glen Martin 60' AL tower with Hazer* is left, may sell for scrap

Repeater Status

- **Quincy**: power supply failed. The MMRA [2m] backup repeater was installed by K1IW (with help from Quincy area MMRA members) which is not currently linked. 220 is not available. The PS has been sent out for repair. A final fix may be a long time coming due to winter conditions.
- **HUB2**: the new HUB2 is built and running on K1IWs dining room table. Some programming is needed along with a specific cable. K1IW hopes to install this during his holiday vacation.
- **North Reading Echolink Problem**: K1IW diagnosed the mystery distortion on Echolink from ***only*** the NR repeaters. Bob traced it to a high audio level on the CTCSS tones from the NR link radio. Bob reduced the overall input level to the Echolink system as an interim solution. The overall Echolink audio level will be a bit low as a result. A final solution will be forthcoming.
- **Overall Echolink/IRLP issues**: the New England 2 reflector that is used for the TIaOS and HHTN nets, and other uses, seems to have some software issues. A solution is being sought.

New Business

- **WA1JIM**: Jimmy Devarie, one of our TIaOS Net Controls, unfortunately passed away in November. We will note this in the January Newsletter. Larry, W1DYJ, will be adjusting the NC schedule.
- **Swap Net**: A recent TIaOS net discussed the new digital swap net on Groups.io: NewEnglandDigitalSwapNet, along with the long-time (over 30 years) swap net on Waltham, 146.64 at 9pm local Wednesdays hosted by John, N1JAF, and the new DMR Swap Net. After much discussion, the consensus was that the best way to promote this was to link the Waltham net into the MMRA network. This would give the Swap Net a much wider audience. This will be looked at once the above mentioned Echolink issues are resolved. If held at the same time as it is currently held, the link would be dropped at 10pm for the HHTN.

16 December 2020 Business Meeting — Minutes — continued

Upcoming Meetings

- January – Larry – W1DYJ CW DXCC in Six Months -- Zoom teleconference
- March – Dave – N1DCH CHIRP programming -- Zoom teleconference
- May – Charles – KC1JUO SDR Presentation -- Zoom Teleconference

Newsletter

- Information to Larry, W1DYJ
- Deadline: Thursday, 31 December
- Email W1DYJ@mmra.org or newsletter@mmra.org

The meeting was adjourned at 8:33 pm, followed by a half hour social session discussing, mostly, telephone nostalgia.

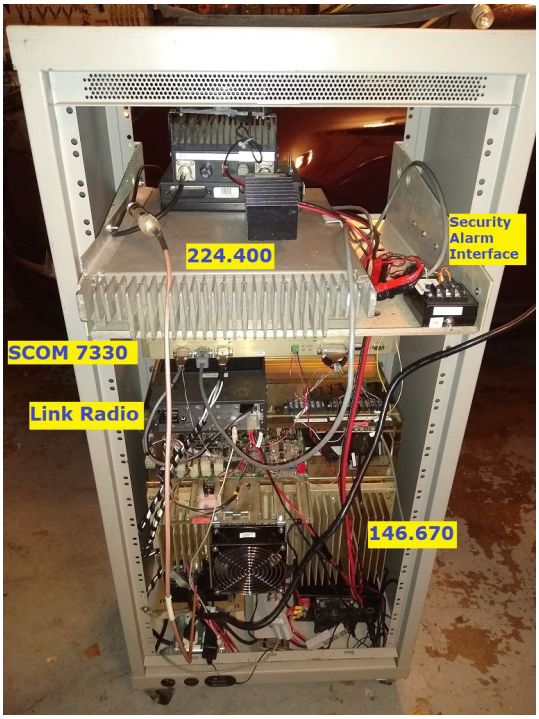
Submitted by Larry Banks

Quincy Repeater Problems ~ Bob DeMattia, K1IW

Early in November the Quincy repeater went off the air. Just before Thanksgiving Bob, K1IW, with the help of Quincy area MMRA members, Michael-K1UVH, Scot-N1JSM, and Bernard-KC1MSN, pulled the repeater for repair. The MMRA's backup repeater (a YAESU DR1X) was substituted while the main repeater was repaired.

This meant that Quincy only had 2M FM, was not linked, and there was no 220 during this period.

The primary problem was a failed power supply, which was repaired and reinstalled. While the repeater was out of service, Bob took the opportunity to replace the cooling fans which had been in continuous operation since 2005. He also rewired the power distribution. On New Years Day Bob replaced the system. **One day later**, the repaired supply failed again and Bob once more traveled to Quincy to install a temporary supply. A new more rugged supply is on order and will be installed in the future. *[Editors comment: this is a two-hour round trip drive for Bob, not counting time on site!]*



Treasurer's Report ~ Kevin Paetzold, K1KWP

The MMRA receives a significant amount of donations each year. Most of this is in direct $ contributions. Some donations are of equipment which the club either uses or sells. Recently **W1BFM, K5TEC, and N1NVK** have all donated equipment which has been sold to generate almost $1000 net for the club. The effort to market, sell, and ship this equipment on eBay has been handled with a lot of work from K1IW (like many/most things).

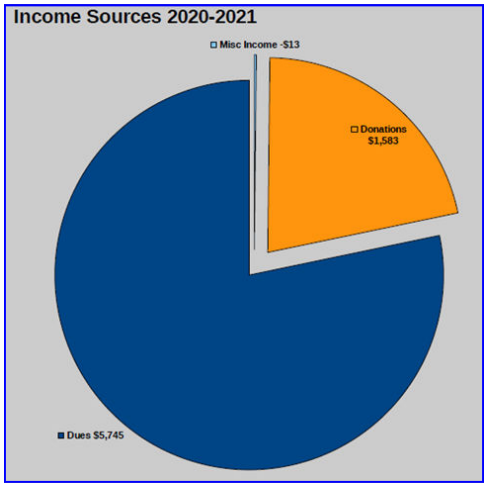
On behalf of the club I would like to thank people below who donated since my list in the previous newsletter.. Hopefully I did not leave anyone off (and if I did I am sorry):

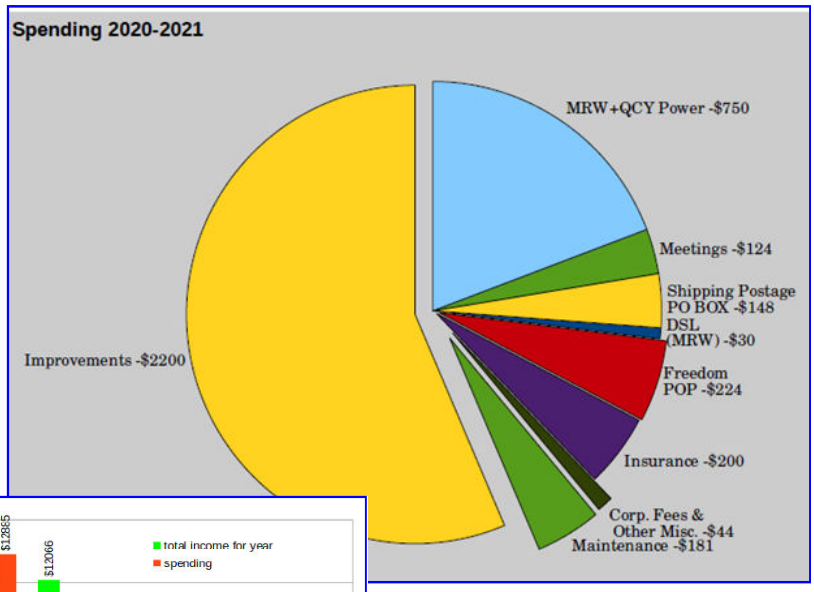
N1JAF **W1BFM** **N1NVK** **K5TEC**

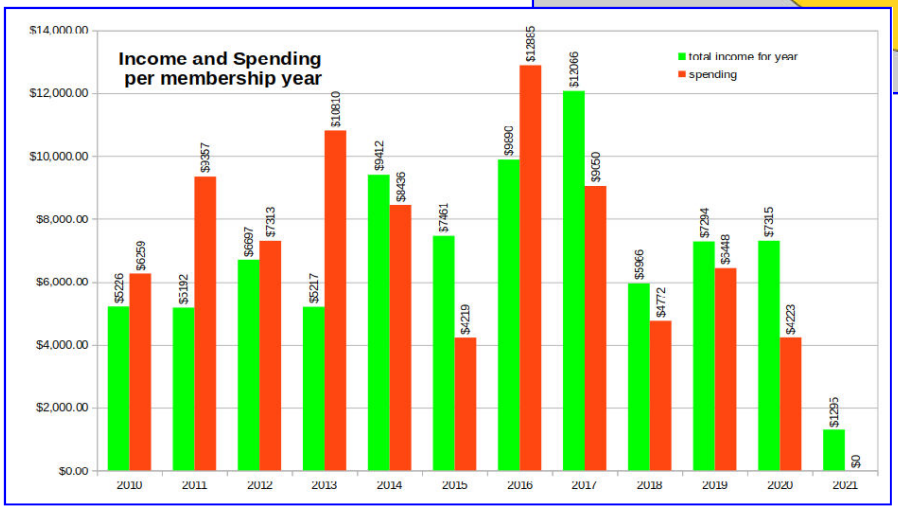
Dues collected so far for this membership year are $5895. This is an increase of $80 from the previous year. 231 members have paid dues so far this membership year.

Given all the fixed costs that I am aware of and the spending which is already approved (that I am aware of) we may end this year in black by $852. Of course there are likely to be various surprises that will result in more spending. For example the repairs to QCY.

The previous 3 membership years were also in the black. However keep in mind that we have some years where we have large expenditures resulted in the club being in the red for $5K, $7K, $3K. Often the clubs largest expenses are antenna projects which usually require professional/insured climbers.







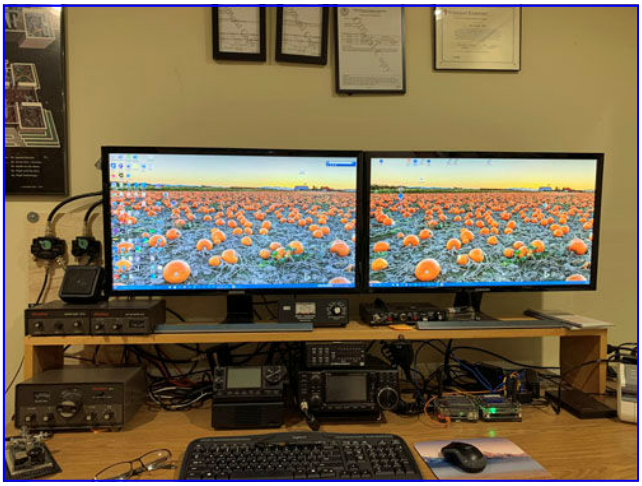
Detailed financial information is usually presented at almost every business meeting. These meetings generally occur in the months which do not have general membership meetings. They are announced on the www.mmra.org website. All members are invited and encouraged to attend these meetings. Of course much more than the finances are discussed at these meetings including repeater status, repeater decisions, planning, etc….

Share a Shack!

Editor's Note: **Welcome to another of our continuing series: sharing a member's ham shack. With the current COVID situation many of us are becoming used to ZOOMing rather than meeting in person. Seeing various shacks in the video backgrounds made me curious. If you have a shack you are willing to share, *let me know*. Complex shack or simple, fixed or mobile, new ham or oldie like me, I'm sure that we are all curious about other's shacks. And this will give us all a way to steal ideas from each other — a basic premise of Ham Radio. The feature will appear *based on your input!*** Larry, W1DYJ

We have two shacks to share this month: N1DCH & N1GWY

Here are some views of Dave, N1DCH's shack



An overall view of my shack. When operating the left screen has my logger, ACLog (from N3FJP) and the right has wsjt-x, N7YG's Digital Engine, or whatever.

This are of two of my three hotspots. This one on the left is connected to DMRMarc via IPSC2-CAN-TRRBO. The one on the right is connected to BrandMeister and is a duplex hotspot. There is a D-Star hotspot setting under the right monitor, not seen in this photo.

My Heathkit HW-9, along with the matching tuner and SWR meter, patiently waiting for me to master code.

My two main radios, the IC-7100 is used for 6m, 2m, 70cm. and the IC-7300 is used for HF and some 6. The IC-7100 is connected to a Diamond tri-band. The IC-7300 has 2 antennas switched by the tuner, a Inverted-L (which works great on 30m & 60m) and a 6m dipole cut for 50.313. I have used the dipole on 10, 20 and 40m via the tuner with a fair amount of success.

Share a Shack! Part II

Bill, N1GWY, shares his "cookie sheet" setup, a quick way for new hams with an HT to access the MMRA repeaters.

This note is for all new Ham Radio operators.

My name is Bill, N1GWY. I have been a Ham for several years. I would like to share some of my experiences with you. If you own any Chinese Hand Held Radio please do not think they will work with optimum performance using the rubber duck antenna included with it. I live in an apartment where outside antennas are not allowed. I had several dual-band mobile antennas with mag mounts from previous setups. I purchased cookie sheets to mount the antennas on. This creates a ground plane effect to improve the antenna's efficiency. Select the highest point near a window to locate the antennas for best performance. *(Editor's note: preferably a window that faces the repeater you are targeting.)*

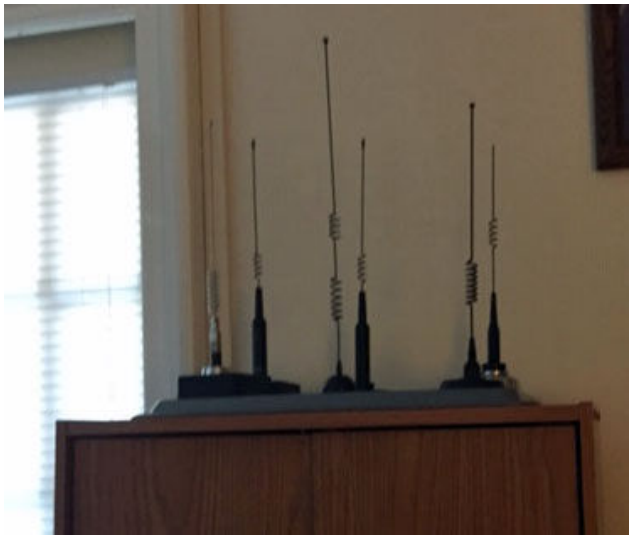
Bill's rigs

This will work for mobile radios as well. I am able to work all UHF, VHF, 6m, and 900MHz Bands. For DMR VHF I use a half-wave 2m mobile antenna, and for 6m a 6m half-wave mobile antenna both with mag mounts on a cookie sheet.

This is what I did to improve the radio's performance.

ENJOY!!

73 all, Bill, N1GWY.



Bill's antennas

Top view of the cookie sheet

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.

Wednesday, 20 January ~ Membership Meeting ~ 7:30 PM
CW DXCC in Six Months
Larry Banks, W1DYJ
Location: ZOOM Teleconference

Wednesday, 17 February ~ Business Meeting ~ 7:30 PM
Location: ZOOM Teleconference

Wednesday, 17 March ~ Membership Meeting ~ 7:30 PM
Program your rig with CHIRP
Dave Hornbaker, N1DCH
Location: ZOOM Teleconference

Wednesday, 21 April ~ Business Meeting ~ 7:30 PM
Location: TBI

Wednesday, 19 May ~ Annual Meeting & Elections ~ 7:30 PM
Program: SDR Presentation
Charles Miller, KC1JUO
Location: ZOOM Teleconference

Wednesday, 16 June ~ Business Meeting ~ 7:30 PM
Location: TBI

Sad News

Our long-time Net Control Jimmy, WA1JIM, passed away suddenly in November. He was always a very positive presence on our nets.

His obituary can be seen at: https://www.keohane.com/services/jimmy-devarie-conde/

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	KB1OQA	Tom Turner
Week 3	KC1CLA	Ed Curley
Week 4	K1KWP	Kevin Paetzold
Week 5	K1BTZ	Jonathan Traum

To connect using Echolink / IRLP during the Net:

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

NOTE: we need another NC to be available as a substitute. If you are interested, email W1DYJ@mmra.org

MMRA Leaders

Executive Board — Officers

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

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Director »2021	Bob DeMattia	K1IW
Director »2021	Roger Coulson	WA1NVC
Director »2022	Rob Evans	N1BE
Director »2022	James Lee	N1DDK

Technical Officer

Technical Officer	Bob DeMattia	K1IW

President Emeritus

Bob DeMattia K1IW

Technical Officer Emeritus

Bryan Cerqua W1BRI

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* Boston 146.82	John Mullaney	K1BOS
* Boston 927.0625	Rick Zach	K1RJZ
* Brookline 145.16	Joyce DeMattia	K1IWW
* Brookline Rcv 146.82	Bob Phinney	K5TEC
* Burlington 224.88	Bruce Pigott	KC1US
* Hopkinton 449.575	Bryan Cerqua	W1BRI
* Marlborough 53.81	Bryan Cerqua	W1BRI
* Marlborough: 29.68, 144.39, 147.27, 223.94, 448.225, 449.925, 927.70 Lowell 442.25 all as W1MRA	Bill Northup	N1QPR
* Mendon 146.61	Kevin Paetzold	K1KWP
* N. Reading 146.715	Bruce Pigott	KC1US
* N. Reading 446.775	Larry Banks	W1DYJ
* Quincy 224.40	Bill Dunn	N1KUG
* Quincy 146.67	Bryan Cerqua	W1BRI
* Weston 146.79	Rob Evans	N1BE
* Weston 224.70	Eddie Mulhern	N1NOM
* Weston 442.70	Dave Hornbaker	N1DCH

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

Contacting the MMRA

Members: mmra@groups.io
Note: This may take some time.
You must be approved by the moderator.
Officers: contact@mmra.org
Control Ops: control-ops@mmra.org

http://www.mmra.org/

@mmraham

https://www.facebook.com/mmraham

Ask your friends to become a member

Just let them know that it is not fully automated. Although they can log into the MMRA website immediately, they need to be manually processed. This could take up to week.

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.

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

MMRA VE Sessions

Stay tuned for more in the future.

Get connected on the MMRA Repeater System ~ Dave Hornbaker N1DCH

What is the best way to get connected on the MMRA repeater system? Try announcing yourself! Just say your call sign followed by "listening". If you want, you can include the last 3 digits of the repeater frequency. For example, "N1DCH listening" or maybe "N1DCH listening on 925", you may very well get a response. Try to connect by announcing yourself several times.

Most of the time, Marlborough Hub1 (449.495) is linked to the following repeaters, Boston (146.820), North Reading (446.775), Mendon (146.610), Lowell (442.250), and Hopkinton (449.575). Remember that when the repeaters are linked, you need to wait two or three seconds after you key up and before you speak. This is especially important on the TIaOS net on Tuesday when most of the repeaters are linked.

You can also link (and delink) the repeaters yourself. See the information you received when you became a member, or check the User Control Codes once you log into the MMRA web.

Try one of the non-linked repeaters too. There are Hams monitoring them as well. For more information on the repeater network and how it is linked at various times, check out https://mmra.org/repeaters/repeater_linking.html.