



## Next Meeting

**Wednesday, February 10**  
**7:30PM**  
**Lunenburg Public Safety Bldg.**  
**“Home Brew Projects”**

MARA is now meeting in the training room of the Lunenburg Public Safety Building at 655 Massachusetts Ave (Route 2A). This is about a mile west of the center of Lunenburg behind TriTown Marine, just east of the Worker's Credit Union building.

When you enter the driveway, go to the right of the building and pass the marked parking spaces along the side of the building. After the marked spaces turn right into the paved training/drill area and park there. Then walk back past the back of the engine bay, past the emergency generator, and go in the second door; that is the outside door to the training room. The lights should be on.

Please DO NOT park along the building at the rear; the Police and Fire Officers use those spaces. Also, Chief Glenny asks that we please leave the parking spaces in the front of the building open for "normal" business use.

## In This Issue...

Next Meeting .....	1
President's Corner .....	1
Watt's Happening .....	2
November Meeting Report .....	3
January Meeting Report .....	4
Old Timer's Lunch .....	5
Signal de NZ1D .....	5
Stamp Collecting to DXCC .....	5
Open House at WTAG .....	7
ARRL NEDiv Cabinet Meeting .....	9

## Contributors To This Issue:

KB1LRL, KB1JXJ, K1JHC, W1BYH,  
W1HFN

## The President's Corner

de Ray, KB1LRL

Hi everyone, I am sitting here thinking what to write about while listening to the wind howl and my barrels rolling down the street, I wish that the warmer weather will get here so we can go about our outside projects and activities. The sad part is when we start to get used to it, it's winter again!!!!!!

I do look forward to the nicer weather so I can get plans underway for the upcoming public service events. This is something that you should try to participate in, at least one. We have a lot of them to choose from. Read the newsletter and we will have a calendar of events.

*continued on next page*

## Watt's Happening

**Sundays, 0800 local 5330.5** (ch 1) USB  
Western Mass Emergency 60M Net  
Alternate frequencies are 5346.5 (ch 2),  
5366.5 (ch 3), 5371.5 (ch 4), and 5403.5 (ch 5).

**Sundays, 0830 local 3937**  
Western Mass Emergency Net. Alternate  
frequency is 3942 in case of QRN, QRM, or  
frequency in-use. Also a good idea to scan up  
and down 10kHz if you cannot find the net.

**Sundays, 0900 local 145.45-**  
Montachusett Emergency Net

**Mondays, 2000 local 147.525 simplex**  
Worcester Emergency Simplex Net

**Tuesdays, 1930 local 145.37-**  
Templeton Emergency Net

**Wednesdays, 2100 local 28.341**  
Harvard Repeater Club  
10 meter sideband net "Activity Night"

**Nightly, 2100 local 146.97-**  
Central Mass Traffic Net

**First Monday, 1900 local 3943, 7245**  
RACES Net

**First Wednesday, 2000 local 3915**  
K1ARC Red Cross Net  
<http://www.qsl.net/k1arc/>

**Feb 13, 2010, Marlboro MA**  
Algonquin ARC Hamfest

**Saturday, March 6, Feeding Hills MA**  
MTARA Hamfest  
Springfield Turnverein Club  
176 Garden Street  
7am for vendors  
9am for bargain hunters

Additional events are listed on  
<http://web.mit.edu/w1gsl/Public/ne-fleas>

## The President's Corner

*continued from page one*

February's meeting hopefully will be fun. We will be discussing further the linking project and we are having a homebrew (or whatever you want to show off) show and tell. I encourage you to join and invite someone too. With regards to the linking project, I strongly urge you write questions down and conduct this in an orderly fashion so that all information can be heard from everyone. We do lose a lot of time when there are 6 separate discussions going on. We will do the best we can to address all questions and concerns.

I hope whoever went to January's meeting enjoyed our new meeting place, as well as the discussion with Mike Raisbeck. I found it quite fun and would like to see him again.

I guess this being a short month I am kind of short on thoughts, but not without a lot of things going on. Keep informed by using the e mail reflector. If you don't have your email in the system, take a moment to get it in there. And, of course, listen on the repeater. Especially if the weather is bad and need to cancel a meeting or anything else that comes up.

Take care and 73's. See you at the meeting.  
Ray



**BELTRONICS, INC.**

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W1ZC  
WW1Z

Tell them you saw it in the W1/GaZette

## The MARA W1/GaZette

is published by the Montachusett Amateur Radio Association just prior to the monthly meeting. The newsletter is distributed free to members and friends of Amateur Radio.

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The deadline for materials to appear in the W1/GaZette is noon on the Sunday before the first Wednesday of the month.

### NEWSLETTER STAFF:

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Club Secretary: Pauline Carulli KB1JXJ  
Annual Dues: Regular \$25  
Family \$30  
Fixed income \$15  
Meetings: 2nd Wednesday, 7:30pm  
September to June

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MARA owns and operates the W1GZ repeater on 145.45 (CTCSS 74.4) in Fitchburg.

## November Meeting Report

de Pauline KB1JXJ

11 November 2009

Lunenburg Public Library Wallace Room,  
Lunenburg MA.

Present: My attendance roster went missing in the holiday whirlwind!!

7:30 Call to order and a moment of silence to remember our Veterans,

Then introductions

7:31 Old business and reports

Oct --Treasurer's report

Starting \$1,366.19

Dues \$70.00

Raffle \$26.00

Ending \$1,402.19

7:34 Accepted

1. Bill N1UZ, Paul W1SEX and Norman W1BYH ---Topic - Linking 4 repeaters along Rt 2 Harvard, Fitchburg, Athol, & Gardner

2. Trustee Charlie KT1I is the contact for the club inventory

3. ID'S If you need one tell Ray KB1LRL

4. IPOD Touch Bob KB1JZU- New technology

8:05 Break

8:20 Program  
Bob, KB1JZU DX Lab

9:10 Adjourn

Respectfully Submitted  
Pauline R. Carulli, KB1JXJ  
Secretary

## January Meeting Record

de Pauline KB1JXJ

13 January 2010

Lunenburg Public Safety Building, Lunenburg MA.

Present: 21- Ray KB1LRL, Gordon N1MGO, Pauline KB1JXJ, Bill N1UZ, Norm W1BYH, Barry W1HFN, Al KB1TNN, Gary K1YTS, Bob KB1JZU, Tom K1JHC, Paul KD1YH, Charlie KT1I, Ed KB1LJJ, David KB1OPS, Ralph KD1SM, Johan K1ARG, Tom AB1GF, Walter K1CMF, John KK1X, John K1TLV, Mike K1TWF, Paul KD1YH

7:30 Call to order and introductions

7:31 Ralph Explains the terms of our use of the Training Room

7:37 Secretary's report -- as printed in news letter

7:37 Accepted

KB1JXJ, Secretary, asks for reimbursement of extra money spent on Holiday Luncheon \$147.00.

7:38 Approved

Discussion follows and a search for a new venue for the event is decided upon.

KB1JXJ will research in the months to follow.

KD1SM, Ralph, requests that KB1JXJ send a note to remind folks (2) who made reservations that did not show that the twenty dollar fee is due.

7:37 Treasurer's report Nov - Dec 2009

Starting \$1,402.19

Dues \$45.00

Raffle \$19.00

PO Box \$92.00

Ending \$1,374.19  
as of 31 Dec 2009

7:40 Accepted

1. Ray -- Homebrew night in March

2. Bill, N1UZ, and Norman W1BYH ---Topic - Linking 4 repeaters along Rt 2 Harvard, Fitchburg, Athol, & Gardner

Would like a club vote

Discussion followed on the subject of Echo Link capabilities.

Vote not taken -- To be next month so there is time for discussion

8:20 Program:  
Mike Raisbeck, K1TWF  
New England Vice Director of ARRL

Taking our input to the ARRL and its upcoming board meeting

9:05 Adjourn

Respectfully Submitted  
Pauline R. Carulli, KB1JXJ  
Secretary

## Old Timer's Lunch

de Tom K1JHC

The Old Timer's lunch was held Wednesday January 6 at Bickford's Restaurant. Those present were Roy W1OOY, Tom K1JHC, Norm W1BYH, Gary K1YTS, Barry W1HFN, Al KA1AKD, and Charlie KT1I.

The main topic of discussion was the RTTY Roundup. Howard W1TQB is now a resident of the Ledgens Rehabilitation Center in Gardner.

Please join with us on the first Wednesday of each month at 12:30.

*Ed. note: Al, formerly KA1AKD, has a new callsign: KB1TNN, effective on the day of the Old Timer's Lunch.*

## Signal de NZ1D

I thought you might get a kick out of my latest emergency power lash-up.

Talk about "ugly construction"! Automatically switches between AC and battery when power fails, etc. It actually does work! Now all I have to do is package it.



*photo and text forwarded by KD1YH*

## FROM STAMP COLLECTING TO DXCC

### A long journey through Ham Radio

de Norm Rivers W1BYH

Perhaps, not surprisingly, my lifelong involvement in Ham Radio, as well as my occupation in various phases of electronics communications started with a small gift from a neighbor of an exotic postage stamp from Jamaica. That was when I was only in the first grade in Fitchburg, where I grew up. That small gift created a continuing interest in, and wonderment about the distant places on this planet. I developed a real interest in learning about the strange and far-away places exhibited through hundreds of colorful pictures of unusual people and places.

In learning more about these exotic places, I spent a lot of time at the Youth Library, where I coincidentally picked up a copy of Boy's Life magazine, which happened to have some articles about world-wide



Short-Wave Listening. That really piqued my interest, as I went home and turned on the old Zenith floor model radio in the living room. After spending hours scanning the bands. I naturally arrived at 20 meters (AM of course!) and started listening to Ham Radio from all over the world. Just happens, the Boy's Life Radio Club was formed, giving certificates for various listening achievements. There was then a month-long contest to receive and log stations, in which I enthusiastically participated - winning a new Hallicrafters S38C receiver and a letter of congratulations from Bill Halligan-WOW - the start of real Ham Radio and Contesting!

While continuing to collect stamps (now from countries I have confirmed on short-wave), I did some stamp trading with one of my Fitchburg High School classmates and encouraged him to get involved in listening also. Soon, we had several others getting interested in Ham Radio. Before long, I learned enough code and theory to pass my Novice license test and received my first callsign WN1BYH. Followed up shortly by my stamp-collecting friend, John Lindholm-WN1DGL, now W1XX and about five other schoolmates. We were an active group and got involved very early in contests, starting with Field Day on Mt. Wachusett in tents and the Novice Roundup. We were all involved with the local Region 9 Amateur Radio Club, which preceded the now MARA. I recall how we walked to the Fitchburg Airport for club meetings and admired all the mobiles with six-meter Hi-Par Saturn 6 halos adorning them! No FM or repeaters in those days - still AM only.

Most of us started off with home-brew single 6V6 oscillators as transmitters, and surprisingly worked into the Midwest and Canada though limited by crystal-control with stations on different frequencies -

what fun! I participated in my first ARRL CW Sweepstakes in 1954 as a Novice (one year license) and made almost 50 contacts - what perseverance -

Within my first year, I had upgraded to General Class Licensee and started using W1BYH to work dx on 15 meters with my new Globe Scout 65 (about 25 watts AM / CW, which I still used in 1962 as KS6AM in Pago Pago, American Samoa.. I had finally "made it" to actually visit and experience the far-off exotic lands across the sea! Got to spend several months operating there and also visit Fiji, Tonga, Hawaii and Canton Island (now Kiribati).

I left the Globe Scout in Samoa for (hopefully) some new DX operators and moved on to spending more time involved in Emergency Communications and Traffic Handling with several ARRL and local activities.

By 1963 I had met and married my wife of 47 years, then raised 6 children (13 grandchildren) and spent lots of time traveling for work, so missed a lot of hamming in the interim. Never missed the yearly Field Day operating and finally got back on the air actively in 1991, with a subsequent emphasis on RTTY operating, and contesting in general.

I have been fortunate to be able to travel to a few more of those "exotic" spots I used to ponder as a young kid, including Aruba, Senegal, Liberia, Nigeria, England, Italy, Mexico, Guatemala, the Dominican, American and British Virgin Islands, Saint Martin and the Bahamas, and have been able to do "dx hamming" from most of these locations.

I was able to finally achieve my DXCC quest with RTTY, CW, PHONE and 5-BAND Worked All Zones, thanks to my long-ago start with a single exotic postage stamp!

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## Open House at WTAG

de Barry W1HFN

On Saturday January 16, WTAG held an open house at their Holden transmitter site on Shrewsbury St. I have driven by that site numerous times as my wife's mother lives in Holden and it just happens to be on the way. I have always wanted to peek in the door and see what's what and then the opportunity presented itself. Our hosts were Don Kelleher, present Chief Engineer, and John Andrews, W1TAG (cool call) ex-CE for 26 odd years. I had a nice long chat with John about his tenure at the site (he lived in a very nice house on the grounds, said the BCI was pretty nasty when he tried to operate the low bands!)



This classic Art Deco building built in 1936 was the new home for the WTAG 1000 watt RCA 1-D AM transmitter. Previous to that date, various transmitters and wire antennas were in use from their studio at the Worcester Telegram and Gazette building on Franklin Street in downtown Worcester.

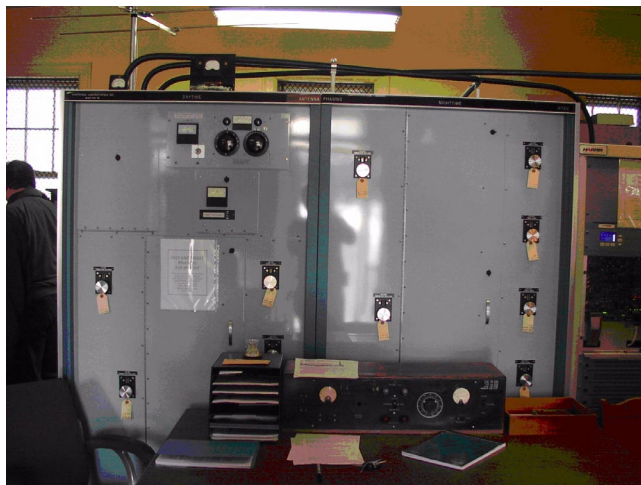


This collection of racks is the microwave STL (studio to TX link) and the various audio processing and monitoring equipments. The program audio from Worcester studio arrives here via the link, gets processed through all that other stuff then goes to the transmitter. Note the large RCA studio speaker on the floor. This building is a veritable radio museum.



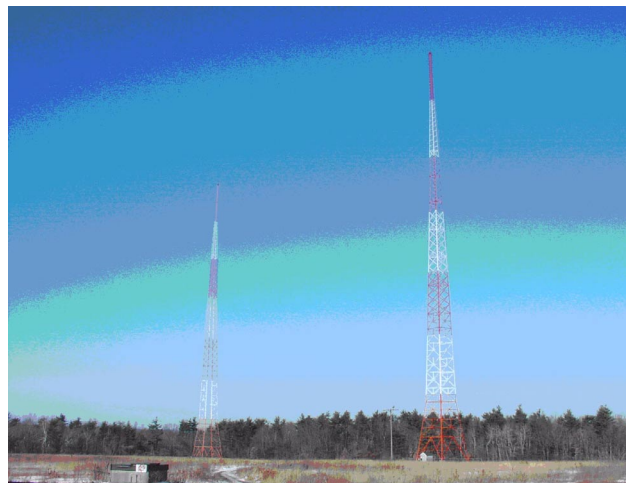


The audio then goes to one or the other of these TX. The current AM transmitter (on the left) is a Harris DAX, with the back-up being another Harris, this model a Gates Five, which leads me to believe that Harris bought out Gates at some point. The clear plastic cover on the DAX protects the HD circuitry. According to the CE, it gave them a bit of trouble initially and required removing the metal cover to look at the function LEDs, so this cover replaced the metal one allowing instant trouble analysis. The top panel with the LCD screen is for control and monitoring. The six horizontal chassis with the green LEDs below the HD board are each 1KW RF amplifier modules. The one with the dead LED is functional, just the LED is out. So this is a 6KW AM transmitter on 580KHz. The backup TX is an all-analog solid-state 5KW rig, while the newer DAX is all-digital.



The RF from the TX next goes here to the antenna phasor. This magic box determines the phasing between the four towers to control the antenna pattern for daytime vs nighttime operation. I could not get an inside pic, but it is beautifully made, all huge silver plated coils, capacitors, etc. The coax on top is the input from the two Harris

TXs, the third is the output to the tower field.



Two of the four towers. The phasor determines which one gets how much RF to alter the radiation pattern. The very large diameter hardline coax is buried in trenches and surfaces into the tuning huts at the base.



One of the tower leg insulators. All four legs of each tower are insulated from ground, as the entire tower radiates. The ball on the short pipe is the grounded part of a lightning arc device. You can just make out the other ball an inch or so above it.





Yes indeed, it's a long way up there. The towers get repainted every 5 -7 years, depending on the weather. John explained the painters do not use brushes or spray, they have shaggy mittens on their hands, just dip it in the bucket of paint and run your hand up and down the steel. When they come in for the day they are head-to-toe orange and white. Bet they get paid well.

It was a very enjoyable visit, I took several more pics, mostly of the antique studio equipment and some very old ham gear lying around. If anyone would like to see those pics, drop me an email at w1hfn@arrl.net and I will forward them.

**ARRL New England Division Cabinet Meeting**

On Saturday, 9 January I attended the ARRL New England Division "cabinet" meeting called by New England Division Director Tom Frenaye K1KI.

All Club Presidents, Section Managers, and Assistant Section Managers in ARRL

sections within the New England Division are invited to this twice-yearly meeting.

The meeting is scheduled for a week or two prior to the ARRL Board of Directors meeting. Tom K1KI uses the meeting to share information and listen to input from the ARRL field appointees within the Division.

Topics discussed at this meeting included Amateur Radio licensing statistics (the number of licensed Amateurs in New England is slowly increasing), opportunities for getting some of the new licensees from the public safety and emergency care communities to participate in other aspects of Amateur Radio, regulatory issues, and reports from representatives of the various Advisory Committees (DXCC, VUCC, etc.)

A lengthy discussion at this meeting concerned recent notices the FCC has issued regarding 97.113 -- the regulation concerning the use of Amateur Radio on behalf on one's employer. The general sense of the discussion was that the FCC is signaling an interest in modifying this rule in some way and would like the Amateur community to discuss what language might better reflect the intent of the rule.

We also heard a report from our Amateur Radio representative to the FEMA New England Regional Emergency Communications Working Group, an update on the status of the Memorandum of Understanding with the American Red Cross, and some discussion of localized malicious interference issues. I hope to be able to share minutes of this meeting in the next newsletter.

Ralph KD1SM

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