



Next Meeting

**Wednesday, October 13
7:30PM**

Lunenburg Public Library

**NOTE: In Person And
Zoom Masks required**

Guest speaker W1SEX

**“Programming your
mobile radio”**

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Contributors To This Issue:

KB1LRL, NZ1D, N1MGO

President's Corner

Hello MARA readers.

As some are aware this club is now in a state of dysfunction. There currently is no president or vice-president and no direction. I have assumed the lead in trying to get it

back on its feet. There are a few reasons for this, some personal.

In the September meeting I laid out the situation and told the attendees what needs to be done. I had some provide assistance and input and there were others that had their usual blank expression where I just don't know if they care or not. Some are key people! A lot of the membership are my friends and I apologize in advance if I come across in a harsh way, it needs to be said. I cannot emphasize that we are hanging on by a thread.

The things we need to focus on is getting the word out that we are still here. We need to contact members active or not to encourage them to come back and be a part of this and to help in our growth. A need to have a consistent, informative newsletter each and every month. Everyone needs to contribute to this. Even if there is stuff that was used historically can be used again.

Another club in my area has a 25-page newsletter!

Other things that need's work is the meetings. This will be my project. Putting together a good meeting content with speakers, activities, etc.

Again, everyone's input is helpful in this. The meeting format will change as I will forego the budget report, minutes, etc. There will be a brief time for socializing then to make any announcements necessary at that time then into the program. Other clubs are doing that with success. All this to start will give members a better sense of value for the dues they pay.

As you can see there is a lot to do and a lot of help is needed. This is YOUR club, not KB1LRL's YOU need to take on the effort as well in order to make it work! I will not accept things that have occurred 1, 5, 15 years ago as reasons against anything. This is a fresh start! If there is a continued non-committal and sea of blank stares, I will cease my efforts and leave the fate up to you. I cannot emphasize this enough and will not labor on it anymore. You have been warned.

This club has been around for around 70 years. It has a nice history and I have the box to prove it. Let keep filling it up with more memories! Please consider helping us out. Thank you.
Ray, KB1LRL

Update on remote radios, by N1MGO

I now have my new Elecraft K4D SDR radio setup as a remote at my house. This is for testing and getting the bugs worked out in anticipation of moving it to our remote location in Westminster. If you want to see some of what it can do come to the Sholan Farms on 23 October, I intend having it there. You can also log on to the remote using RCForb client (N1MGOK4), just send me an email first because I have to enable it for each user's callsign. We don't have the full remote with the bandscopes yet, the software is being worked on. If you are limited in your home location for putting up HF antennas, or other problems, and want to do some HF work you can use the full remote in Westminster, again just email first because I have to enable each users callsign.

Thanks,
Gordon - N1MGO

Watt's Happening

Sundays, 0830 local 3944

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

Wednesdays, 1900 local 145.37-

Gardner/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 3944, 7245

RACES Net

George's Old Timers Net 1930 hours

146.970 Paxton Repeater Near-Fest Oct.

15,16 Deerfield NH

Additional ham fest and flea market

information can be found on the W1GSL

New England Area Ham - Electronic Flea

Market list at

<http://web.mit.edu/w1gsl/Public/ne-fleas>

NEAR-Fest, October 15 & 16

information at [Home - NEAR-Fest.com](http://Home-NEAR-Fest.com)

Sholan Farms, October 23

Play Radio event at Sholan Farms, bring

radio's, antennas, treats, and yourselves.

"Just for FUN!"

VE Session, October 30

Contact K3n WB8PKK for details

Think Fall!

Time to get the antenna projects done for the winter season!!

I'm happy to announce that I have secured Sholan Farms on Saturday October 23rd to have a "Play Radio" get together. This is simply a get together to bring equipment and operate, experiment, socialize, etc. I believe it will be in the back Gazebo. It will give us the opportunity to demonstrate to any visitors that may come to see what's going on. The event runs from 10am-3pm. Feel free if you want to bring a treat to share or stop at the farm and get some apples. Bring what you wish as far as equipment.

Anyone is welcome to attend. Also bring ideas for future events. Spread the word. Members from Mohawk are certainly welcome also.

Hope to see you there!

Thank ye
Ray KB1LRL

The MARA W1/GaZette

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

September Meeting Report

Minutes of the Montachusett Amateur Radio Association (secretary was absent)

Contests coming up for the next month:

JARTS WW RTTY October 16 & 17
10-10 Int. Fall contest, CW October 16 & 17
ARRL School Club Roundup, all mode Oct18-22
Stew Perry Topband Challenge, CW Oct 23-24
CQ WW DX Contest, SSB Oct 30-31

There are many other contests going on it this time frame.

For more info see:

<https://www.contestcalendar.com/index.html>

VE Team Report

None held, coming up this month, October 30.
Contact Ken, WB8PKK for details.

Old Timers Lunch

Meetings have been stopped pending covid 19 changes. Please check with Tom, K1JHC for updates on when they will resume.

Section Managers Report October 2021

Hello once again! The switch got flipped and fall is here. It's nice that the temps have calmed down some, but I don't like what looms ahead. This is the perfect opportunity to get your antenna projects completed before that white stuff shows up. A huge shout out and thanks got to Larry W1AST and Chris W1TRK from HCRA for coming to my QTH and fixing my tri-bander and replacing the rotator. Chris demonstrated some good skills in prep, safety in climbing the tower. Well done!

On Sept 19, I visited the Picnic and Radio's event held by the Franklin Co. club on top of Mt. Sugarloaf in S. Deerfield and was treated to great weather, good fellowship and food. There was over 30 people there from 2 clubs and also an unexpected bonus as there were some hams on the observation tower doing the 10 ghz contest. That was interesting to see. Passers by stopped and asked

questions and it kept some busy especially Aaron KF1G with technical assistance and general questions while working the POTA event.

The above event has inspired me to do something similar as one club is struggling at this time and I am trying to get it back on its feet. On October 23rd I am having a Play Radio Day at Sholan Farms in Leominster. Anyone nearby is welcome to stop by and support our effort. It will run from 10-3.

There are clubs still having meetings via Zoom still as some facilities have not opened up their facilities. Others are live once again and are simulcasting with Zoom which helps out and shows a greater versatility in their meetings especially with presentations. A little imagination can go a long way to boost your club.

Ballots are now hitting mailboxes for the Division election. Please read what the candidate's messages have and VOTE. We have not seen an election like this in a long time. Speaking of elections, yours truly was re-elected for another two years by another landslide. You guessed it, no one else applied for nomination. It really is hard to determine if this is a result in my doing a good job or that no one really cares. I hope it's not the latter. When I started this journey, my hopes is to get this area interested in participating in whatever capacity it is. This is still a struggle to this day. Everyone can help in promoting radio, teaching, mentoring, and getting them licensed and active.

Making them welcome is a HUGE part of it as well.

It was great to see everyone at the Convention in Marlboro. It was determined the event was a success despite the fall out of presenters and commercial vendors. The Friday flea market was a huge success in my eye!

Whew! I had a mouthful to say. Remember I am here still. Questions, comments, etc. Just shoot me an email. I am your representative to the League.

73 All

Ray KB1LRL

The “ZIPPY ZEPP de NZ1D

In the continuing vein of *I'M NOT A FLY FISHERMAN: or don't spend your kids' inheritance on antennas*, I present my latest project: the MacGyver “Zippy” Zepp. I wanted to put a quick 20-meter antenna in the back yard without the risk of the lawnmower ravaging my vertical's counterpoise. I rummaged in my junk box and came up with a “sort-of” Zepp using one leg of the defunct G5RV Jr and a junk-box hunk of TV lead-in. I describe it as “sort-of” because a classic Zepp is an end fed 1/2 wave antenna, which has an impedance of perhaps 2K ohms, fed with a resonant 1/4 wave two-wire feeder that transforms the antenna impedance down to the 50 ohms the radio wants to see.

My antenna wire is approx 25.5 ft, which is a 3/8 wave on 20m (it's also three 1/4 waves on 10). The Zepp “feeder” is 35 ft of 300 ohm TV twin-lead, which is a 1/2 wave on 20 and two 1/2 waves on 10, so it repeats the antenna's impedance at the near end (200-300 ohms on 20 and around 50 ohms on 10). To pass thru the aluminum window frame I used 20 ft RG-58 with a 6T 6-in. dia. current choke at the coax/twin lead interface to dampen any reflections on the twin-lead that may find their way to the coax.

The standard Zepp is traditionally a mono-band antenna. For multiband use most texts recommend the flat top should be 1/2 wave at the lowest frequency but *“the length of the antenna is not critical, nor is the length of the line....The length of the antenna can be considerably less than a 1/2 wave and still be very effective. If the overall length is at least a 1/4 wave at the lowest frequency, a quite usable system will result.”* [ARRL Antenna Book, 2005, p. 7-4,5]

Generally the feeder can be any convenient length but lengths that are multiples of 1/4 wave may give trouble (see comment re 40 meters later). Mine is based on two things: (1) what I had on hand without mods and (2) an old World Radio article, in which the mysterious Kurt N. Sterba showed a 40-10 meter version consisting of a 25-ft flattop fed with 25-ft ladder line and a 4:1 balun to match the changes in antenna Z on other bands [World Radio, Aug 2005, p. 54]. I didn't shorten my ladder line nor do I have a 4:1 balun at the coax junction at this time. (The balun wouldn't be needed on 10.)

So how does it work? Tests on 20 meters showed a Return Loss (RL) of about -4 dB (that's the difference in dB between “what goes out and what returns back”; i.e., higher is better).

Troll caveat: Figures below are as good as I was able to measure with my rudimentary equipment. Return Loss was calculated based on power readings.

Band	pf watts	pr watts	RL dB	SWR
20 m	100	40	-3.98	4.4:1 calc.
10 m	100	nil	>-26	1:1 measrd.
6 m QRP	3.5	1	-5.44	3.3:1 calc.

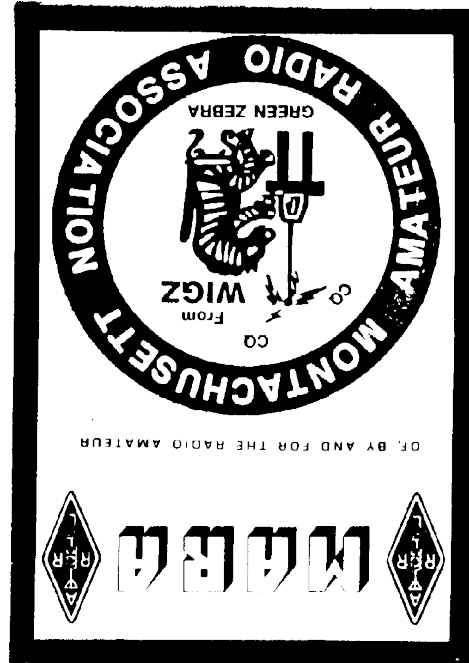
I was unable to tune the antenna on 40. (No surprise, it is only 0.18 wavelength, and perhaps only a few ohms impedance.) The 35-ft feeder, now 1/4 wave, transforms that to a very high impedance and almost all the forward power is reflected. Adding a 4:1 balun and/or changing the feeder length might help.

On 20 I used an MFJ-941C tuner to reduce the operating SWR to 1:1, on 10 and 6 the tuner was not used. At the time this was written, since I had installed the two dollar MacGyver Q'nD vertical, I had logged 612 Q's (mostly CW) in 75 countries. Of these, in five weeks, 90 Q's were on the "Zippy" Zepp, 10 countries, 30 states, and on 6 meters running only 4w out, 13 grids from Mexico to Northern New Hampshire. The farthest 20 m contact west ZL (8300 miles), JA (7200 miles, Marquesas French Polonesia (5577 miles)), and east UA3 European Russia (5200 miles).

Zippy Zepp cost: zippo, butkus, nichts, null, rien, zero, nada, cero!



Fig 1. NZ1D's MacGyver "Zippy" Zepp



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