FEBRUARY 2015 VOLUME 54, ISSUE 6

QRA WAS FOUNDED ON NOVEMBER 18, 1948
IN WAKEFIELD, MASSACHUSETTS
1948-2014, OUR 66th YEAR

<table>
<thead>
<tr>
<th>CLUB OFFICERS</th>
<th>BOARD OF DIRECTORS</th>
</tr>
</thead>
<tbody>
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</tr>
<tr>
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<tr>
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<tr>
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</tr>
<tr>
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</tr>
<tr>
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</tr>
</tbody>
</table>

CORRESPONDENCE

Hello!

The Algonquin Amateur Radio Club of Marlborough MA is holding its annual Ham Radio flea-market on Saturday, February 14, 2015. We invite all hams as buyers, vendors or ragchewers. VEC licensing exams will also be available, starting at 9:00 AM.

If any of you club's members might be interested in attending, could you forward this notice?

The market will held at the 1Lt Charles W. Whitcomb Middle School (25 Union St, Marlborough MA), located within about two miles of the intersection of I-290 and I-495.

Doors open at 6:30 AM for vendor setup and 9:00 AM for buyers. We have alternate/overflow parking at the nearby Marlborough High School with a bus running between parking lots and the flea entrance.

General admission is $5.

Vendor tables may be purchased in advance for $15 (before Feb 6 or $20 at the door) and include admission for one.

Details and a flyer with a vendor reservation form are available through our web page: www.n1em.org (aka. www.qsl.net/n1em/) Further queries can be sent to: fleamarket@n1em.org

Thank you! Tim Ikeda - KA1OS, Flea market manager for the Algonquin ARC
WITH JUST A WSPR

It's really amazing what you can do with computers in amateur radio, and there's been an explosion in the number of digital modes. One interesting mode that I've recently been introduced to is WSPR, which is short for Weak Signal Propagation Reporting. The protocol and the original WSPR program was written by Joe Taylor, K1JT, and is designed for sending and receiving low-power transmissions on the HF bands to test propagation paths.

I won't try to cover all the technical details here. There are several sites that cover them pretty well:
* G4ILO's Shack: WSPT - Distant Whispers (http://www.g4ilo.com/wspr.html)

I was introduced to WSPR by my friend, Joe, AC8ES. He posted a message to our club mailing list asking if anyone had a toroid core that he could buy to make a QRP balun for 10 MHz. When I asked what he was going to use it for, he said that he was making a WSPR transmitter with a Raspberry Pi, and the balun was for the dipole he built for it. He said that he'd gotten roped into doing this because he'd attended a local Raspberry Pi users' group, and when he mentioned him as an amateur radio operator, they encouraged him to try this project.

How could I refuse a request like that? I have a whole kit of ferrite cores, and after some back and forth, we found a small core that he could use.

The software he chose is WsprryPi (https://github.com/JamesP6000/WsprryPi). It's described as a "Raspberry Pi transmitter using NTP-based frequency calibration." It uses a GPIO port to generate WSPR signals anywhere from 0 to 250 MHz. Joe said that there are several Raspberry Pi programs that run WSPR, but that he chose this one because it seemed to have more features than the others.

Figure 1 shows Joe's setup. Since the output generates a square wave, a low-pass filter is needed to filter out the high-frequency components. As you can see, the GPIO output is fed through a 0.1uF decoupling capacitor into a Mini-Circuits 10.7MHz low-pass filter, then to a 1:1 balun, which is connected directly to the dipole elements.

Joe says, "The antenna is just a dipole taped up to the walls of my living room and hallway." As you can see he made the balun and dipole from 24 ga. speaker wire.

The performance of this setup has been kind of amazing. In one e-mail, Joe reported, "Your toroid seems to be working well. Got the balun and antenna finished and executed seven WSPR transmissions from the Raspberry Pi. The WSPR reporting website WSPRnet (http://wsprrnet.org) came back with a couple dozen reception reports; typical distance is ~300+ miles, max was 593 miles." In a second e-mail, Joe writes, "Did a few more beacon transmissions and checked the WSPR signal reports again. Someone picked up my 5 mW signal from 1010 miles away in Canada."

Joe's turned into quite a WSPR fan. He's even written an Android app - WSPRnet Viewer (https://play.google.com/store/apps/details?id=com.glandorf1.joe.wsprrnetviewer.app) to retrieve and displays report from www.wsprrnet.org. Tapping on a specific report displays more details about it, along with a world map that shows transmitter and receiver locations.

Unfortunately, I don't have a Raspberry Pi, or I'd try this as well. I do have a BeagleBone Black, but there doesn't seem to be software that I can download and install as easily as the Raspberry Pi software. That being the case, this might be a good excuse to purchase one of those new, cheaper RPIs.

By Dan Romanchik, KB6NU


KDA Custom Embroidery is owned by QRA member Paul Anderson, KA1GIJ and his wife Kathleen. For 18 years, Paul and Kathleen have been providing customized embroidery and screen-printing from their shop on Pearl Street in Reading. Names, monograms, call signs, logos and designs (stock or customized) can be stitched on hats, shirts, sweatshirts, polo-shirts and more. Purchase garments from them or provide your own.

Visit: www.kdaembroidery.com, email to kdace@aol.com or call Kathleen at (781) 942-0421.
DUES ARE DUE NOW
STILL ONLY $15.00

Dues can be paid to the club treasurer ay the next meeting or sent to him at:
QRA c/o Jeff Hollis, W1CKH, 46 Bond St., Reading, MA 01867-2432

DAYTON HAMVENTION-MAY 15-17, 2015

DAYTON HAMVENTION, the world’s largest amateur radio gathering, will be returning to Hara to celebrate the 60th show on May 15-17, 2015. Close to 500 indoor exhibits and over 2,500 outdoor exhibits showcase the latest in amateur radio equipment, technology, computer software and hardware-along with hard-to-find radio and computer accessories and equipment.

QRA MEMBERSHIP MEETING

The QRA holds its membership meetings at the Reading, MA Senior Citizen Center at 49 Pleasant Street in the old fire house. All are invited and holding an Amateur Radio license is not required. Meetings begin around 7:00 pm on the third Thursday of each month. We have very interesting speakers. Come join us and bring a friend with you.

THE Shameless Wolf

Web, http://www.shamelesswolf.com
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QRA members get 25% off labor when you mention this ad, compliments of Brian, W0IVES

WE ARE ON THE WEB AT: WWW.W1EKT.ORG
NEXT QRA MEMBERSHIP MEETING
IS THURSDAY
FEBRUARY 19, 2014
AND WILL START AT
*** 7:00 PM ***

Our speaker for the meeting will be
Steve Telsey N1BDA
his subject will be
FORMAL MESSAGE TRAFFIC

Passing “MESSAGE TRAFFIC” is key to the foundation in the development of amateur radio
and the main reason the ARRL was created

Also at the February meeting

We will be looking for volunteers to be the club Nominating Committee for the 2015 club election. The
duties of the Nominating Committee requires them to contact members to fill vacancies in the election of
Club Officers (1 year) and Board of Directors (2 years). The Nominating Committee will give a progress
report to the membership at the April membership meeting, nominations to be closed at the May meeting
prior to the elections.

Bob Thompson, N1CIH of Winchester, has donated a used Kenwood TR-7950 2-meter radio to the club. I
hooked it up to a power supply and it receives and transmits. The digital display has some dead spots. We
will be auctioning this radio off for the club at this meeting.

2015 BOXBORO CONVENTION

Tickets for the 2015 Boxboro convention are now on sale.
As you may have notice, we are breaking the usual "every other year" schedule and are having a
convention this year, so help us spread the word to your friends and acquaintances that there IS a
convention this year.

The committee is lining up speakers, forums and exhibitors, so many details are still to be
announced. However, Gordon West WB6NOA is confirmed as the keynote speaker at our
Saturday banquet.

And finally, be the first on your block to get tickets. http://www.boxboro.org

73, Bob DeMattia ,Vice Chairman, Boxboro Convention Committee
I NEVER KNEW THAT

'A SHOT OF WHISKEY'
In the old west a .45 cartridge for a six-gun cost 12 cents, so did a glass of whiskey. If a cowhand was low on cash he would often give the bartender a cartridge in exchange for a drink. This became known as a "shot" of whiskey.

THE WHOLE NINE YARDS
American fighter planes in WW2 had machine guns that were fed by a belt of cartridges. The average plane held belts that were 27 feet (9 yards) long. If the pilot used up all his ammo he was said to have given it the whole nine yards.

BUYING THE FARM
This is synonymous with dying. During WW1 soldiers were given life insurance policies worth $5,000. This was about the price of an average farm so if you died you "bought the farm" for your survivors.

IRON CLAD CONTRACT
This came about from the ironclad ships of the Civil War. It meant something so strong it could not be broken.

PASSING THE BUCK / THE BUCK STOPS HERE
Most men in the early west carried a jack knife made by the Buck knife company. When playing poker it was common to place one of these Buck knives in front of the dealer so that everyone knew who he was. When it was time for a new dealer the deck of cards and the knife were given to the new dealer. If this person didn't want to deal he would "pass the buck" to the next player. If that player accepted then "the buck stopped there".

RIFF RAFF
The Mississippi River was the main way of traveling from north to south. Riverboats carried passengers and freight but they were expensive so most people used rafts. Everything had the right of way over rafts which were considered cheap. The steering oar on the rafts was called a "riff" and this transposed into riff-raff, meaning low class.

COBWEB
The Old English word for "spider" was "cob".

SHIP STATE ROOMS
Traveling by steamboat was considered the height of comfort. Passenger cabins on the boats were not numbered. Instead they were named after states. To this day cabins on ships are called staterooms.

SLEEP TIGHT
Early beds were made with a wooden frame. Ropes were tied across the frame in a criss-cross pattern. A straw mattress was then put on top of the ropes. Over time the ropes stretched, causing the bed to sag. The owner would then tighten the ropes to get a better night's sleep.

SHOWBOAT
These were floating theaters built on a barge that was pushed by a steamboat. These played small towns along the Mississippi River. Unlike the boat shown in the movie "Showboat" these did not have an engine. They were gaudy and attention grabbing which is why we say someone who is being the life of the party is "showboating".

OVER A BARREL
In the days before CPR a drowning victim would be placed face down over a barrel and the barrel would be rolled back and forth in an effort to empty the lungs of water. It was rarely effective. If you are over a barrel you are in deep trouble.

BARGE IN
Heavy freight was moved along the Mississippi in large barges pushed by steamboats. These were hard to control and would sometimes swing into piers or other boats. People would say they " barged in".

HOGWASH
Steamboats carried both people and animals. Since pigs smelled so bad they would be washed before being put on board. The mud and other filth that was washed off was considered useless "hog wash".

CURFEW
The word "curfew" comes from the French phrase "couvre-feu", which means "cover the fire". It was used to describe the time of blowing out all lamps and candles. It was later adopted into Middle English as "curfeu", which later became the modern "curfew". In the early American colonies homes had no real fireplaces so a fire was built in the center of the room. In order to make sure a fire did not get out of control during the night it was required that, by an agreed upon time, all fires would be covered with a clay pot called-a "curfew".

BARRELS OF OIL
When the first oil wells were drilled they had made no provision for storing the liquid so they used water barrels. That is why, to this day, we speak of barrels of oil rather than gallons.

HOT OFF THE PRESS
As the paper goes through the rotary printing press friction causes it to heat up. Therefore, if you grab the paper right off the press it’s hot. The expression means to get immediate information.

Thanks to Bill Hooper, W1QEC
NOTE TO OUR MEMBERS

Now would be a good time for our members to start thinking about having ARRL Field Day. It is held on the last weekend each June. We will need a volunteer to be Field Day Chairman and to coordinate the event. The QRA has not been involved in Field Day for the last few years and when we did have it, it was a lot of fun for everyone who attended.

COME JOIN THE QRA 2-METER NET
ON TUESDAY EVENINGS

WA1RHN/R AT 7:30 PM ON
147.075

QUANNAPOWITT RADIO ASSOCIATION
6 SAVIN STREET
BURLINGTON, MA. 01803-2210

EMAIL: AA1M@ARRL.NET
CLUB CALL – W1EKT

QRA WEBSITE:
WWW.W1EKT.ORG

FIRST CLASS MAIL TO:

WE ARE ON THE WEB AT: WWW.W1EKT.ORG