



# The HARC Spark

The Official Newsletter of the  
Holmesburg Amateur Radio Club  
WM3PEN 146.685 Mhz Repeater  
K3RJC 444.9 Mhz Repeater  
K3FI - CLUB CALLS - WM3PEN  
Web Site <http://www.harcnet.org>



January 2016

*January meeting features talk on the stories behind qsl cards.*

## The Story behind those QSL Cards

Tom, AF4NC, was an airline pilot and got to meet many of the operators he got qsl cards from. He has some interesting stories to tell. Tom is also the ARRL EPA Assistant Section Manager. Come out and learn about some interesting people behind the qsl card.



From Tom's Qrz.com page

I got interested in radio while in high school. I built a transistor radio kit receiving the AM band about age 13. After high school (1964) I joined the Marines and was sent to electronics repair school in San Diego. I became a SSB technician on ground support equipment. Imagine that . . . shortly afterwards I earned the First Class Commercial License with Radar endorsement. While visiting the MARS station, I was hooked, and earned my first call WA3PNO in 1968. I earned a secondary MOS as a MARS Operator and ran a lot of phone patches while in Nam and Japan. While in the Marines I earned a degree in math from San Diego State, and later went to Cal Tech Pasadena California where I earned a degree in physics.

In the 80s and early 90s, got involved in NTS traffic handling. Earned the BPL medallion, PSHR almost monthly, ran a amlink station in North Texas Section. I cofounded the Texas Amateur Radio Speakers Association and had the following appointments in North Texas: Official Observer Coordinator, Assistant Section Manager, Net Manager, Official Relay Station, Official Emergency Station, and VE. I earned the 30 WPM CW Certificate from the ARRL at a local Hamfest graded by monitors. I unplugged and boxed all my gear in 1993 because I was traveling a lot out of the country as a pilot on private B-737s, and Gulfstream aircraft. I have flown around the world in everything from private Boeing 737-800, Gulfstream IV, III, II, Challenger Series, Westwinds, Learjets and Cessna Citations. I usually take a portable HF station with me on my travels.

I was dormant until March 2014 when I hooked up with K3TX on CW Traffic Net and now Im hooked again. Trying to get my code speed back up. I love CW traffic handling and meeting fellow traffic handlers. I retired as a pilot in 2012, but I still fly a Cessna Citation part time for a friend. I can be heard mobile in my travels. I have completed the Appalachian Trail, the John Muir Trail and have climbed 11 peaks over 14,000 feet in Colorado. I still backpack a lot especially in the fall. I travel frequently to Yellowstone NP, and Hawaii doing photography workshops.

Wildlife photography is a very special second hobby. I teach wildlife and nature photography with Princeton Digital Photo.

## HARC Board of Directors

President/Treasurer - Bob Josuweit, WA3PZO

Vice President - Greg Malone, WA3GM

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WM3PEN @ AOL.COM

H.A.R.C. Monthly Meetings - The Board of Directors meets on the 1st Thursday @ 7:30 PM (Odd number months). General meetings are held the 3rd. Thursday @8:00 PM. Pathway Bldg, Philadelphia Protestant Home, 6401 Martins Mill Road at Tabor Rd . Phila PA. Picnic in August. Holiday Dinner in December.



H.A.R.C maintains the 146.685 repeater located @ Univ. of PA., Phila PA with inputs in Abington, N.E. Phila, and Cherry Hill, NJ; More Club Information & Member Applications can be had by contacting any of the Directors via E-mail.

[WM3PEN@arrl.org](mailto:WM3PEN@arrl.org), the web page

<http://www.harcnet.org> or writing to HARC 3341 Sheffield Ave, Philadelphia, PA 19136.

Keep up on the latest HARC news by checking out the Club website

[www.HARCNET.org](http://www.HARCNET.org)

### Upcoming Events

January 21 - QSL card stories

February 18 - HARC meeting

March 13 - Charter Day

## PHILA ARES INFORMATION

All amateurs interested in participating should check into the Phila ARES Net, Sunday's at 9:00 PM, hosted on the Phil-Mont Repeater System; 147.030 MHz (+offset 91.5 PL) ;444.80 MHz (+offset 186.2 PL) When control operators are available, Echolink node 29742, WU3I-L, is on the repeater. Backup link is KB3IV-L.

All interested amateurs are welcomed and encouraged to check in for more information. There is always a different topic of interest to the amateur community discussed with an informal round table of comments and suggestions.

Look forward to having all check in on Sunday nights @ 9:00 pm. See web site for more information.

- Visit the Philadelphia ARES web site

<http://www.harcnet.org/aresindex.html>



## VE SESSIONS

PhilMont Mobile Radio Club has testing in Ambler, PA on the 4th Thursday of every month. Exams , 1414 E. Butler Pike in Ambler, PA.

Registration begins at 7pm.

Warminster Amateur Radio Club has testing the last Wednesday evening of each month except August and December. The sessions are at the Warminster Recreational and Educational Center on Little Lane, and start promptly at 7:00 PM (registration 6:45 PM).

Bryn Mawr - quarterly on a Saturday. Contact Bob Lees, W3ZQN, [rjlees@aol.com](mailto:rjlees@aol.com)

## HF AWARDS MANAGER

Are you getting close to having all 50 states confirmed for the Worked All States award or working enough grid squares for to qualify for the VUCC Award? As a HARC service you can now have your QSL cards verified by Bob, WA3PZO, and not have to ship the cards to ARRL Headquarters. You must be an ARRL member to qualify for the awards. Additional information and links can be found on the HARC website ([www.harcnet.org](http://www.harcnet.org))

## Pennsylvania Charter Day March 13, 2016

On March 13, HARC will celebrate Pennsylvania's 335<sup>th</sup> birthday by participating in Charter Day events.

Charter Day is the day King Charles of England granted William Penn a charter for land in the New World to make up for a large debt that the king owed to Penn's father.

William Penn had initially decided to name the land "Sylvania," which in Latin means woods. King Charles II added the prefix Penn to the name in honor of William Penn's father, Admiral Sir William Penn, who had served England as a rear admiral.

Pennsylvania state museums are open for free on Charter Day and it's the one day each year that the Charter is put on display at the state museum in Harrisburg.

WM3PEN (William 3 Penn) will be on the air from 1300Z - 2300Z as band conditions permit. A special QSL card will be offered featuring William Penn. Interested in being part of the special event contact WA3PZO.

When you work WM3PEN send an SASE or Green Stamp (\$1) with your QSL to WM3PEN. You can also QSL via the bureau. SWLs may send a confirmation of reception to request a QSL card. Simply indicate the stations making contact with WM3PEN, time, frequency, and your receiving equipment. SWL stations should follow the same mailing instructions.

### Stamps For the Wounded



also requested each stamp should have at least a

HARC members are collecting postage stamps for the Stamps For the Wounded program. *Stamps for the Wounded* accepts any U.S. or foreign stamps that are not torn or damaged. They have

quarter-inch margin around the stamp. Do not try to either to peel or steam the stamp off the original envelope.

So save the stamps from your qsl cards or other mail. They do not need the common Flag Forever stamp. Bring the stamps to a club meeting and give them to Rich, AB3EO, who will mail them.

Many stations, including DX, included extra stamps with their qsl cards for WM3PEN that we are able to pass onto the SFTW program. We had 4 stamp albums donated and several mailings once stations received an insert with SFTW information in their qsl card. We even had inquiries from 2 clubs interested in starting their own program.

## Pennsylvania "67" Challenge Award

Amateur Radio operators around the world have the opportunity to participate in the Pennsylvania "67" Challenge. The Challenge, sponsored by the Holmesburg Amateur Radio Club, is to make contact with all 67 Pennsylvania Counties. The Challenge is open to all amateur radio operators regardless of individual station capabilities. All contacts must be 2-way communications made in real time. These contacts may be on any Amateur Radio band/mode.

Contacts made using repeating devices such as FM repeaters, Amateur satellites, moon-bounce, and keyboard-to-keyboard contacts through digipeaters/nodes are valid, because these QSOs are made in real or near-real time. Contacts using IRLP, Echolink, or D-Star are valid as long as a radio is being used by both operators. All contacts must be made from the same county.

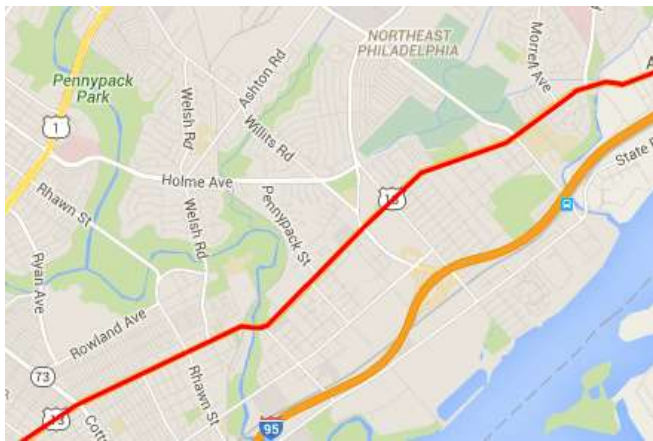
As an incentive Pennsylvania "67" Challenge certificates may be earned by working stations in 20, 40, 60, or all 67 Counties. Paper or electronic QSLs are acceptable. The contacts can be verified by a local club officer or mailed to the Holmesburg Amateur Radio Club.

Complete rules are posted on the HARC website. Questions on the Award can be directed to HARC at [WM3PEN@ARRL.NET](mailto:WM3PEN@ARRL.NET).

## HARC in the Park? A National Park?

At the January ARRL Board Meeting, Board Members okayed a National Parks On The Air (NPOTA) operating event in 2016 to celebrate the National Park Service centennial.

HARC members may not have to travel far to activate a National Park Service Unit. **The Washington-Rochambeau Revolutionary Route** is a National Historic Trail that tells how French statesmen, armies, and fleets helped the United States win independence in 1775-1783. The Route goes from Massachusetts to Virginia, passing through Philadelphia along Rt 13, Frankford Ave.



Saul, W3WHK, is in contact with the Northeast Philadelphia Historical Society to see if there is some way we can combine their history activities with the NPOTA event. Stay tune.

## Analogue Is Back From the Future

One of big events in consumer electronics is the January Consumer Electronics Show in Las Vegas. While one of the hottest gifts this year was hoverboards, three of the hottest items at the show included a cine camera, a record turntable and a new Polaroid snapper. This might suggest that people are getting tired of the digital revolution. Only time will tell, but watch for a turntable from Sony and Panasonic.

## HISTORY OF THE CAR RADIO

Seems like cars have always had radio's, but they didn't. By Steve Stalker, WA0SRS

Here's the story:

One evening, in 1929, two young men named William Lear and Elmer Wavering drove their girlfriends to a lookout point high above the Mississippi River town of Quincy, Illinois, to watch the sunset.

It was a romantic night to be sure, but one of the women observed that it would be even nicer if they could listen to music in the car.

Lear and Wavering liked the idea. Both men had tinkered with radios (Lear served as a radio operator in the U. S. Navy during World War I) and it wasn't long before they were taking apart a home radio and trying to get it to work in a car.

But it wasn't easy: automobiles have ignition switches, generators, spark plugs, and other electrical equipment that generate noisy static interference, making it nearly impossible to listen to the radio when the engine was running.

One by one, Lear and Wavering identified and eliminated each source of electrical interference. When they finally got their radio to work, they took it to a radio convention in Chicago.

There they met Paul Galvin, owner of Galvin Manufacturing Corporation. He made a product called a "battery eliminator", a device that allowed battery powered radios to run on household AC current.

But as more homes were wired for electricity, more radio manufacturers made AC-powered radios.

Galvin needed a new product to manufacture. When he met Lear and Wavering at the radio convention, he found it. He believed that mass-produced, affordable car radios had the potential to become a huge business.

Lear and Wavering set up shop in Galvin's factory, and when they perfected their first radio, they installed it in his Studebaker.

Then Galvin went to a local banker to apply for a loan. Thinking it might sweeten the deal, he had his men install a radio in the banker's Packard.

Good idea, but it didn't work well. Half an hour after the installation, the banker's Packard caught on fire. (They didn't get the loan.)

Galvin didn't give up. He drove his Studebaker nearly 800 miles to Atlantic City to show off the radio at the 1930 Radio Manufacturers Association convention.

Too broke to afford a booth, he parked the car outside the convention hall and cranked up the radio's volume so that passing conventioners could hear it. That idea worked -- He got enough orders to put the radio into production.

**WHAT'S IN A NAME** That first production model was called the 5T71.

Galvin decided he needed to come up with something a little catchier. In those days many companies in the phonograph and radio businesses used the suffix "ola" for their names - Radiola, Columbiola, and Victrola were three of the biggest.

Galvin decided to do the same thing, and since his radio was intended for use in a motor vehicle, he decided to call it the Motorola.

But even with the name change, the radio still had problems: When Motorola went on sale in 1930, it cost about \$110 uninstalled, at a time when you could buy a brand-new car for \$650, and the country was sliding into the Great Depression. (By that measure, a radio for a new car would cost about \$3,000 today.)

In 1930, it took two men several days to put in a car radio. The dashboard had to be taken apart so that the receiver and a single speaker could be

installed, and the ceiling had to be cut open to install the antenna.

These early radios ran on their own batteries, not on the car battery, so holes had to be cut into the floorboard to accommodate them.

The installation manual had eight complete diagrams and 28 pages of instructions. Selling complicated car radios that cost 20 percent of the price of a brand-new car wouldn't have been easy in the best of times, let alone during the Great Depression.

Galvin lost money in 1930 and struggled for a couple of years after that. But things picked up in 1933 when Ford began offering Motorola's pre-installed at the factory.

In 1934 they got another boost when Galvin struck a deal with B. F. Goodrich tire company to sell and install them in its chain of tire stores.

By then the price of the radio, with installation included, had dropped to \$55. The Motorola car radio was off and running. (The name of the company would be officially changed from Galvin Manufacturing to "Motorola" in 1947.)

In the meantime, Galvin continued to develop new uses for car radios. In 1936, the same year that it introduced push-button tuning, it also introduced the Motorola Police Cruiser, a standard car radio that was factory preset to a single frequency to pick up police broadcasts.

In 1940 he developed the first handheld two-way radio -- The Handy-Talkie for the U. S. Army.

A lot of the communications technologies that we take for granted today were born in Motorola labs in the years that followed World War II.

In 1947 they came out with the first television for under \$200.

In 1956 the company introduced the world's first pager; in 1969 came the radio and television

equipment that was used to televise Neil Armstrong's first steps on the Moon.

In 1973 it invented the world's first handheld cellular phone.

Today Motorola is one of the largest cell phone manufacturers in the world.

And it all started with the car radio.

WHATEVER HAPPENED TO the two men who installed the first radio in Paul Galvin's car?

Elmer Wavering and William Lear, ended up taking very different paths in life.

Wavering stayed with Motorola. In the 1950's he helped change the automobile experience again when he developed the first automotive alternator, replacing inefficient and unreliable generators. The invention led to such luxuries as power windows, power seats, and, eventually, air-conditioning.

Lear also continued inventing. He holds more than 150 patents. Remember eight-track tape players? Lear invented that.

But what he's really famous for are his contributions to the field of aviation. He invented radio direction finders for planes, aided in the invention of the autopilot, designed the first fully automatic aircraft landing system, and in 1963 introduced his most famous invention of all, the Lear Jet, the world's first mass-produced, affordable jet.

(Not bad for a guy who dropped out of school after the eighth grade.)

Sometimes it is fun to find out w some of the many things that we take for granted actually came into being.

## February 19-20, 2016, Doubletree Guest Suites, Plymouth Meeting, Pennsylvania

The Winter SWL Fest is a conference of radio hobbyists of all stripes, from DC to daylight. Every year scores of hobbyists descend on the Philadelphia, Pennsylvania suburbs for a weekend of camaraderie. The Fest is sponsored by NASWA, the North American Shortwave Association, but it covers much more than just shortwave; mediumwave (AM), scanning, satellite TV, and pirate broadcasting are among the other topics that the Fest covers. Whether you've been to every Fest (all 28, starting with the first year at the fabled Pink & Purple Room of the Fiesta Motor Inn) or this year's will be your first, you're sure to find a welcome from your fellow hobbyists.

For 2016, the Winter SWL Fest will have two days of sessions where you can learn about the latest developments in the radio listening hobbies, but there's so much more going on. There's a silent auction that takes place, where you're bound to find something of interest. There's the Hospitality Suite, where attendees partake of tuning oil and other treats and engage in spirited conversations. There is the closing Banquet, with after-dinner remarks by a luminary from the field, often one of the many broadcasters who attend the Fest, followed by the raffle, where you could win one or more of the dozens of prizes, ranging from pens from stations up to top-notch communications receivers. And of course, the infamous midnight ride of Pancho Villa that closes things out every year.

Your hosts, Richard Cuff and John Figliozzi, work throughout the year to ensure that attendees have a great time over the weekend, and by all accounts, they succeed stunningly. How else could this event have lasted for 29 years (egad) and draw people from around the world to southeastern Pennsylvania? Won't you join us?

For more information: [www.swlfest.com](http://www.swlfest.com)

## What would Wayne (Green) do?

By Dan Romanchik, KB6NU

Wayne Green was a crackpot...but he was a great one.

For those of you who aren't as old as I am, Wayne Green, W2NSD, was not only the publisher of 73 Magazine, but also the founder of Byte and other PC magazines in the early days of personal computing. In 73, he would write these long, rambling editorials. Often, he would take the ARRL to task, criticizing what he thought to be some lunk-headed policy or another.

Just as often, he'd be encouraging hams to take up some new technology. He was, for example, one of the guys driving hams to set up repeater systems.

He would often exhort hams to get started in their own technology-related business. I remember one column where he urged hams to get involved in the home-security business. And, of course, when personal computers became popular, he wrote that hams should think about getting into that business. His reasoning was that our knowledge of electronics would stand us in good stead in those businesses.

Today, I think that he would be telling us to get more involved in with technologies like the Internet of Things, WiFi, or whatever other wireless technology is coming down the pike. "Wireless" is the key word here. These networking technologies are based on good, old radio, and who better to push these technologies forward than guys like us who understand radio.

This point was brought home to me last week as I was interviewing an executive of a wireless company for an article that I'm writing. He said to me that many of the companies he works with are taking a software-centric view to their wireless products. They simply use the reference designs provided by the wireless chip makers and expect those designs to work flawlessly in their products.

While they often do, he gave me an example where simply using the reference design was a colossal failure. In one case, he said, the company mounted the board inside a metal enclosure. Since the antenna was part of the printed-circuit board, the enclosure acted like a shield, and of course, the device had little or no range.

He went on to say that he thought that there was a real shortage of experienced RF guys in the wireless industry. Does that sound like an opportunity to you? It does to me. So, I'm going to make like Wayne Green here and exhort all you guys to get out there and take advantage of it.

This is not only a business opportunity, but a way for amateur radio operators to fulfill a couple of the "purposes" of amateur radio, as set forth in Part 97.1 of the amateur radio regulations. Part 97.1(b) says that one of the purposes of the Amateur Radio Service is "Continuation and extension of the amateur's proven ability to contribute to the advancement of the radio art." According to Part 97.1(d), another purpose of the Amateur Radio Service is "Expansion of the existing reservoir within the amateur radio service of trained operators, technicians, and electronics experts."

Let's do it!

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When he's not ruminating on the latest wireless technologies, KB6NU likes to make use of some vintage wireless technologies by working CW on the HF bands. He's also a prolific blogger ([www.kb6nu.com](http://www.kb6nu.com)) and the author of the "No Nonsense" amateur radio license study guides ([www.kb6nu.com/study-guides](http://www.kb6nu.com/study-guides)). If you have a comment or a question, email him at [cwgeek@kb6nu.com](mailto:cwgeek@kb6nu.com).

**HOLMESBURG AMATEUR RADIO CLUB**

3341 Sheffield Ave., Philadelphia, PA 19136  
"Serving the Community Through Ham Radio"

**Next Club meeting is January 21, 2016**

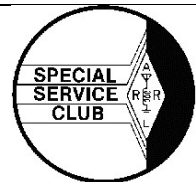
**Topic: Stories behind qsl cards.**



**HOLMESBURG AMATEUR RADIO CLUB  
2016 MEMBERSHIP FORM**

**HARC, 3341 Sheffield Ave, PHILADELPHIA, PA 19136**

<http://www.harcnet.org>  
WM3PEN/K3FI



All members in good standing are eligible to vote and hold a board office. Dues are \$20.00/year.

Make checks payable to H.A.R.C. and mail to 3341 Sheffield Ave, Philadelphia, PA 19136. Membership year begins May 1.

NAME \_\_\_\_\_ CALL \_\_\_\_\_

ADDRESS \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Telephone # \_\_\_\_\_ Starting in May Newsletter will only be sent by email.

E-mail \_\_\_\_\_

Are you an ARRL member? YES NO Membership Expires (mm/yy) \_\_\_\_\_