

June 2014

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>



Field Day/13 Colonies Prep Meeting Room Change June 19, 2014

June 19 HARC Meeting

HARC's busiest time of the year is upon us. First Field Day at Avelthorpe Park is June 28 and 29. Just 2 days later on July 1, the 13 Colonies Special Event starts up running until July 6.

There will be a special function in our regular meeting room. We will meet in the Directors meeting room located in the main building to the left of security across from the ball room. Security will be notified and will direct you to the meeting room. July's meeting will be back at the usual location.

Elections of Officers

New officers were elected at the May meeting. Thanks to Mike, N3LXN, for years of service as president.

President/Treasurer – Bob, WA3PZO
Vice President – Greg, WA3GM
Secretary – Charlye, K3CJ
Member-at-large – Mike, N3LXN
Sol, N3UBY
Technical – Ron, K3RJC

The HARC 2014-15 Membership year began May 1. Dues are just \$20. Your support helps fund club activities, repeater expenses, and insurance. Use the membership form on pg. 10.

HARC FIELD DAY June 28 - 29

Alverthorpe Park off of Jenkintown Rd.



Field Day is a picnic, a campout, practice for emergencies, an informal contest and, most of all, FUN! ARRL Field Day is the single most popular on-the-air event held annually in the US and Canada. On the fourth weekend of June of each year, more than 35,000 radio amateurs gather with their clubs, groups or simply with friends to operate from remote locations.

It is a time where many aspects of Amateur Radio come together to highlight our many roles. While some will treat it as a contest, other groups use the opportunity to practice their emergency response capabilities. It is an excellent opportunity to demonstrate Amateur Radio to the organizations that Amateur Radio might serve in an emergency, as well as the general public. For many clubs, ARRL Field Day is one of the highlights of their annual calendar. (cont. pg 3)

HARC Board of Directors

President/Treasurer - Bob Josuweit, WA3PZO

Vice President - Greg Malone, WA3GM

Secretary - Charley Johnson, K3CJ

Technical - Ron Cardullo, K3RJC

Member-at-Large - Sol Volen, N3UBY
Mike Wurgley, N3LXN

Webmaster - Rich Shivers, AB3EO

Newsletter Editor - Bob Josuweit, WA3PZO
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.

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>



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



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

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)

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

www.HARCNET.org

Upcoming Events

13 Colonies/Field Day – June 19

13 Colonies QSL Party – July 17

HARC Picnic – August 24

Continued from pg 1. (Field Day)

The contest part is simply to contact as many other stations as possible and to learn to operate our radio gear in abnormal situations and less than optimal conditions.

We use these same skills when we help with events such as marathons and bike-a-thons; fundraisers such as walk-a-thons; celebrations such as parades; and exhibits at fairs, malls and museums — these are all large, preplanned, non-emergency activities. But despite the development of very complex, modern communications systems — or maybe because they ARE so complex — ham radio has been called into action again and again to provide communications in crises when it really matters. Amateur Radio people (also called “hams”) are well known for our communications support in real disaster and post-disaster situations.



www.arrl.org

Philadelphia area Ham Radio operators celebrate July 4th holiday with 13 Colonies Special Event

Amateur radio stations operating from the 13 original U.S. colonies will be joined by members of several Philadelphia area amateur radio clubs to celebrate Independence Day from the city where independence was declared, Philadelphia, PA.

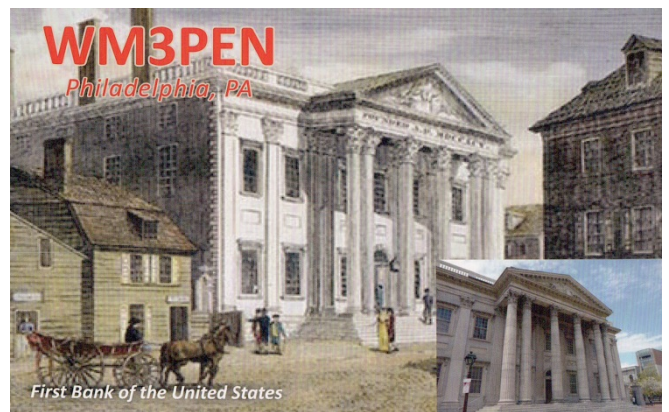
The six day event, July 1-6, allows amateur radio operators around the world to learn about the original 13 colonies and the city where Independence began.

This will be the fourth year members of the Holmesburg Amateur Radio Club (HARC) will be participating. Also participating will be members of the Philmont Mobile, Drexel University, and University of Pennsylvania Amateur Radio Clubs. Joining for the first time will be members of the Philadelphia Digital Radio Association.

The theme for the 2014 event is the Colonial Currency. Each of the original 13 colonies will be represented by a special event amateur radio station, K2A-K2M. The Philadelphia group, using the call WM3PEN, will offer a special QSL card featuring the First Bank of the United States. Also this year W3FT will be on from Baltimore, MD celebrating the 100th anniversary of the writing of the Star Spangled Banner. In all you can collect 15 QSL cards during the 6 day event and earn a nice certificate.

There will be several new aspects to this year's event. QRP or low power stations will be operating from each of the 13 Colonies. Thanks to members of the Philadelphia Digital Radio Association, WM3PEN will be on D-STAR. They will be on the air from 7PM – 11PM EDT. In the Philadelphia area they will be on the K3PDR repeater. Those out of the area can connect to REF 063 D. Both operators must use a radio for the contact to be valid for the event.

For more information on the event checkout the website, www.13colonies.info.



Friendship Across The Pond

For the past few years on July 4 radio contact has been established between the Strabane ARC and WM3PEN. John Dunlap, the printer of the Declaration of Independence, was from Strabane, Northern Ireland. This year comes word that due to illness of the operators or their families they may not be on the air this year. Our best to them for a speedy recovery.

AB3EO Steps Down As Philadelphia Emergency Coordinator

Rich, AB3EO, is stepping down as Philadelphia Emergency Coordinator for the past five years. Over the years Rich has met with various officials discussing amateur radio and has run the Philadelphia ARES most Sunday nights. In addition Rich maintains not only the HARC website, but also the Philadelphia ARES website which is on the HARC page.

The following email was sent to Philadelphia ARES members.

June 9, 2014

As some of you may already know, our Philadelphia ARES Emergency Coordinator (EC), Rich AB3EO, has resigned effective June 15, 2014. Rich has done an excellent job during his five years as EC and we all wish him well. By the way, the next time you hear Rich AB3EO on the air please thank him for his service to Philadelphia ARES.

Because you have shown an interest in Emergency Communications within the city and county of Philadelphia, I am asking if anyone may be interested in becoming the next Philadelphia EC. There are only two requirements to become EC, you must hold an Amateur Radio Technician Class or higher license, and be a Full ARRL member. Living in or working in Philadelphia is a plus. EC Responsibilities may be found on the following web site:

<http://www.arrl.org/emergency-coordinator>

Please forward this e-mail to your club newsletters, club e-mail distributions, and anyone that may be interested in becoming the next Philadelphia Emergency Coordinator.

If you have any questions or concerns please contact me at my e-mail address: k3ith@arrl.net

I'm looking forward to hearing from you. Thank you and 73,

Dick Stewart, K3ITH
ARRL EPA Section- ARES First District
District Emergency Coordinator (DEC)
Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties



Have you been working WIAW portable?

WIAW will be on the air from every state and most territories, and it will be easy to work WAS working only WIAW portable operations. 424 Pennsylvania hams have uploaded their logs to LOTW. WA3GM is in the top 50 for working WIAW and WA3PZO is in the top 100. WM3PEN is in the top 150. Complete info on this special event can be found at: <http://www.arrl.org/centennial-gso-party>.

Stamps For the Wounded

HARC members will start 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 also requested each stamp should have at least a 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.

★ *The 6th Annual:* 4TH OF JULY WEEK - 13 ORIGINAL COLONIES SPECIAL EVENT ★
Presented By The Original 13 Colonies Special Event Group - Independence week - 2014

K1A - NEW YORK

CONTACTS

K1J - NEW JERSEY

K1B - VIRGINIA

CLEAN SWEEP

K1K - NORTH CAROLINA

REVOLUTIONARY WAR ERA COLONIAL CURRENCY

K1C - RHODE ISLAND

K1L - MASSACHUSETTS

THIS IS TO CERTIFY THAT **A15.000011** HAS PARTICIPATED IN THIS 4TH OF JULY WEEK SPECIAL EVENT, HONORING THE "13" ORIGINAL COLONY STATES AND OUR NATION'S INDEPENDENCE IN 1776. GOD BLESS AMERICA

KEN VILONE - K1LUS: EVENT MANAGER *Ten Villone 73*

K1D - CONNECTICUT

K1E - MARYLAND

K1F - GEORGIA

K1G - PENNSYLVANIA

K1H - DELAWARE

K1I - VIRGINIA

K1J - NORTH CAROLINA

K1K - MASSACHUSETTS

Four Days in May

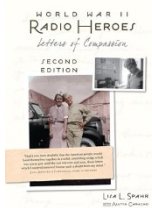
Better known as the Dayton Hamvention, this annual pilgrimage for many amateur radio operators was an event to be talked about. According to Hamvention officials 24,873 people attended the event this year. Greg, WA3GM, travelled to Dayton to hang out with some presidents. Here he is with ARRL President and former Paoli resident Kay, N3KN.



Greg WA3GM and Ten-Ten President Mel Sojka KD5DE



Greg WA3GM being interviewed by Sam N8VES for an Internet radio show. Notice the travelling tower.



World War II Radio Heroes
Letters of Compassion
Second Edition Lisa Spahr
List: 19.95

Just \$15.00 Contact:

WM3PEN@AOL.com or Bob, WA3PZO

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.

SOLAR MINI - MAX

June 10, 2014: Years ago, in 2008 and 2009 an eerie quiet descended on the sun. Sunspot counts dropped to historically-low levels and solar flares ceased altogether. As the longest and deepest solar minimum in a century unfolded, bored solar physicists wondered when "Solar Max" would ever return.

They can stop wondering. "It's back," says Dean Pesnell of the Goddard Space Flight Center. "Solar Max has arrived."

Pesnell is a leading member of the NOAA/NASA Solar Cycle Prediction Panel, a blue-ribbon group of solar physicists who meet from time to time to

forecast future solar cycles. It's not as easy as it sounds. Although textbooks call it the "11-year solar cycle," the actual cycle can take anywhere from 9 to 14 years to complete. Some Solar Maxes are strong, others weak, and, sometimes, as happened for nearly 70 years in the 17th century, the solar cycle can vanish altogether. Pesnell points to a number of factors that signal Solar Max conditions in 2014: "The sun's magnetic field has flipped; we are starting to see the development of long coronal holes; and, oh yes, sunspot counts are cresting."

Another panelist, Doug Biesecker of the NOAA Space Weather Prediction Center, agrees with Pesnell: "Solar Maximum is here *Finally*." According to an analysis Biesecker presented at NOAA's Space Weather Workshop in April, the sunspot number for Solar Cycle 24 is near its peak right now.

They agree on another point, too: It is not very impressive.

"This solar cycle continues to rank among the weakest on record," comments Ron Turner of Analytic Services, Inc. who serves as a Senior Science Advisor to NASA's Innovative Advanced Concepts program. To illustrate the point, he plotted the smoothed sunspot number of Cycle 24 vs. the previous 23 cycles since 1755. "In the historical record, there are only a few Solar Maxima weaker than this one."

As a result, many researchers have started calling the ongoing peak a "Mini-Max."

Pesnell believes that "Solar Cycle 24, such as it is, will probably start fading by 2015." Ironically, that is when some of the bigger flares and magnetic storms could occur. Biesecker has analyzed historical records of solar activity and he finds that most large events such as strong flares and significant geomagnetic storms typically occur in the declining phase of solar cycles—even weak ones.

Indeed, this "Mini-Max" has already unleashed one of the strongest storms in recorded history. On July 23, 2012, a plasma cloud or "CME" rocketed away from the sun as fast as 3000 km/s, more than four times faster than a typical eruption. The storm tore through Earth

orbit, but fortunately Earth wasn't there. Instead it hit NASA's STEREO-A spacecraft, which recorded the event for analysis. Researchers now believe the eruption was as significant as the iconic Carrington Event of 1859—a solar storm that set telegraph offices on fire and sparked Northern Lights as far south as Hawaii. If the 2012 "superstorm" had hit Earth, the damage to power grids and satellites would have been significant.

It all adds up to one thing: "We're not out of the woods yet," says Pesnell. Even a "Mini-Max" can stir up major space weather—and there's more to come as the cycle declines.

Author: Dr. Tony

Phillips | Credit: Science@NASA

Stay Connected!

The HARC Club net meets every Wednesday night at 8 PM on the Club repeater. Check in and see what's going on.



HARC has a Facebook page. Sign up today.

Follow HARC on the web at www.harcnet.org and via the HARC Spark.

ARRL Announces Free Exam Review Website

The ARRL has launched a new online resource that allows users to take randomly generated practice exams using questions from the actual examination question pool. ARRL Exam Review for Ham Radio™ is *free*, and users do *not* need to be ARRL members. The only requirement is that users must first set up a site login (this is a different and separate login from your ARRL website user registration).

<http://arrlexamreview.appspot.com/>

“The ARRL’s online Exam Review is designed to help license examination candidates review their progress as they study,” said ARRL Marketing Manager Bob Inderbitzen, NQ1R. “As you complete a chapter or section of a license manual, you can turn to the online program to review all of the related questions taken directly from the examination question pool. After answering each question — right or wrong — the correct answer is shown, and a page reference to the license manual is displayed for further review.”

Inderbitzen said that when you’re close to completing your study, you can take as many practice exams as you like. “The practice exams can be taken on-screen or printed. You won’t have any surprises on exam day!” he added.

Inderbitzen said users are encouraged to share feedback and suggestions for improvement with the development team, using the online feedback form linked from the Exam Review site. ARRL Exam Review was designed for ARRL by DHF Systems, the creator of ARRL’s TravelPlus for Repeaters™ software.

Education Services Manager Debra Johnson, K1DMJ, pointed out some of ARRL Exam Review features that are intended to help Amateur Radio instructors and schoolteachers. “Instructors have a new online resource at their fingertips,” she said. “They can print practice exams anytime and encourage students to review between classes. The site is also mobile-browser friendly, so it can be used on a laptop, tablet, or smartphone, at home or in the classroom.”

While ARRL Exam Review is being introduced with the new, third edition of the popular Technician study guide, The ARRL Ham Radio License Manual, the site also supports practice examinations for General and Amateur Extra. An updated Technician class examination question pool becomes effective July 1, and Exam Review will automatically transition to the new question pool on that date.

Feature: A Century of Amateur Radio and the ARRL

When the US entered World War II, Amateur Radio operations were immediately shut down for the duration. After one false start, authorization soon was given for amateurs to operate on 112 MHz for emergency drills and actual emergency operations, as members of the War Emergency Radio Service (WERS).

During the war years *QST* published many articles on WERS equipment suitable for 112 MHz -- especially portable and hand-held gear -- and on club preparedness. Announcements in *QST* made repeated calls for trained operators to volunteer for the military and for civil service. At one time, the Navy made a call for 5000 men specifically to be trained as radar operators and maintenance personnel -- state-of-the-art work.

As America's young men went to various parts of the world to fight the war, the nation called on its women to help

with the war effort. Many female hams became military radio operators within the US, and others went to work in defense plants building radio equipment, just as their sisters built the aircraft, ships, and vehicles required by modern warfare.

Manufacturers' ads in *QST* started using photos of radio operation during military training maneuvers



and even from the battlefield. Early in the war years, manufacturers were unable to keep up with the military's demand, and other ads called for hams to sell or donate their radio gear and components (panel meters were especially needed) for the war effort. Manufacturers expanded their facilities and work forces as quickly as possible, and they soon were able to meet the need.

It has been reported -- but never confirmed -- that, following the attack at Pearl Harbor, Japanese Admiral Isoroku Yamamoto said, "I fear all we have done is to awaken a sleeping giant and fill him with a terrible resolve." Regardless of the proof of that exact quote, Admiral Yamamoto's writings confirmed that those were, indeed, his feelings. And those feelings were soon proven to be correct.

Feature: A Century of Amateur Radio and the ARRL

During the war years, *QST* featured a number of articles on basic cryptanalysis, an important wartime area. Other articles went back to radio basics, to help hams still at home to brush up on their theory. Still others reported on advances in the state of the radio art. Articles showed military radio setups in use by the Signal Corps in the field during training exercises, by the Army Air Corps, by the Navy on board ships, by the Marines, and by the Coast Guard. The ARRL stood firmly behind the war effort, and did everything it could to help it.

QST began listing the names of hams who were missing in action, and of those confirmed by the Red Cross as being prisoners of war. Later in the war, *QST* carried reports of "Gold Star" hams -- those who had died as a result of military action.



The principles of radar were well known in the technical community, but this was highly classified work during the war. The veil of military secrecy was lifted just enough for the first "official" announcement of the existence of radar in the military to be made on April 25, 1943.



The April 1944 issue of *QST* included plans for "A Workable WERS Battery Transceiver."

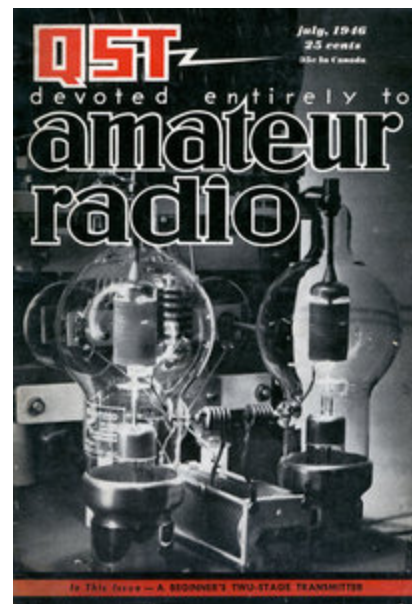
Later in the war, US hams started receiving unusual German-language signals in the vicinity of 10 meters. An investigation by the FCC and other government agencies showed that what those hams were hearing were transmissions from tank-borne tactical radios of the Afrika Korps, commanded by Field Marshall Erwin Rommel -- "the Desert Fox" -- during battles in North Africa. Hams who were fluent in German had a ringside seat to some fierce action!

By 1944, stories of hams' experiences in military action began appearing in *QST*. The magazine also included such tales as "Hamfest in North Africa" (*QST*, Feb 1944), as hams got together here and there around the world

By 1945, when it became certain that the Allies would win the war, attention turned toward post-war hamming. Articles in *QST* described modern VFO and transmitter construction, small portable stations, antenna advances, and VHF/UHF equipment and techniques. Everyone was ready to return to "normal," and the League was pushing for that return!

In May 1945, the FCC announced its plan for the Amateur Radio bands when the war was over. Among other things the 2½ and 1¼ meter bands would be shifted to the frequencies they occupy today. In June, the FCC announced that it would delete the 5 meter band and replace it with 6 meters.

And then, the war was over! The documents were signed on August 14, 1945, to formally end hostilities. On August 15, ARRL asked the FCC to re-open the ham bands. The very next day, the FCC announced that the 112 MHz (2½ meter) band would be immediately opened for ham use. Slashing through miles of red tape, the band was opened on August 21. We were back on the air, even though it was on only one VHF band that would shortly become another!



The July 1946 *QST* contained plans for "A Beginner's Two-Stage Transmitter."

Other bands were opened to ham operation as quickly as possible, but military communications first had to be moved away from the amateur bands. Making all those military frequency changes was not an easy task, but it was done as quickly as possible. After military circuits had been moved from a given ham band, the FCC would release it for ham use.

The 160 meter band remained closed to hams. During the war, a then-secret navigation system called LORAN (for "Long-Range Aid to Navigation") had been developed and placed in the 1.8 to 2.0 MHz band. After the war it continued to be widely used for maritime

navigation. Hams eventually were allowed back on 160 -- at first with reduced power limits but ultimately, after LORAN went away, with normal power limits.

In another change that came with post-war Amateur Radio, the FCC rezoned the 48 states into 10 call areas, rather than the previous 9. New W0-prefix call signs started showing up on the air. Those were *new* licensees. Hams who had been living in the new 10th call area before the war could continue to use their W9-prefix call signs until renewal time, at which time their call signs were switched to the W0-prefix.

By early 1946, 10 meters had been reopened for amateur use, and the ARRL threw a "Band-Warming Party" in February and March 1946. The Band-Warming Party was a worldwide QSO party, with both CW and phone operation. It was a nice way to celebrate being back on the air! -- *Al Brogdon, WIAB*

War is always terrible, and World War II was one of the worst. But, while war wreaks havoc and destruction on nations and people, it always brings about major advances in technology that can be transferred to peacetime use. Amateur Radio benefitted from many of those advances following World War II.

During the war years, reliable communication was essential. Studies of the characteristics of the ionosphere and how sunspots affect propagation tremendously enhanced our understanding of signal propagation. The upper limit of easily usable frequencies had been pushed much higher during the war. Through *QST*, the League made sure hams learned about such scientific progress.

Much military surplus equipment was not well suited for ham use, but many hams figured out how to convert those radios for the ham bands. Others recycled the components. The prices of parts, tubes, and coaxial cable were remarkably low.

During the war, the military or the federal government purchased virtually



An aerial view of the Project Diana site. [US Department of Defense photo]

the entire production output of radio equipment manufacturers. Within months of the war's end, equipment manufacturers had switched to producing ham gear -- and it was far superior to what had been available before the war.

After World War II, the ARRL announced that hams -- whether seasoned old-timers or brand-new licensees -- would have to start from scratch to earn the postwar DXCC. That made for lots of excitement when the HF bands again were opened to ham radio.

In January 1946 Project Diana used a converted military transmitter to send a radio signal to the Moon, which bounced back to Earth and was detected by equipment at the Evans Signal Laboratory at New Jersey's Fort Monmouth. A 0.25 second pulse of 111.5 MHz energy was beamed at the Moon, and 2.5 seconds later a faint "beep" was heard by Herb Kauffman, W2OQU, one of several hams involved in the experiment.

*Hmmm...111.5 MHz. Perhaps hams could do that on 2 meters. -- This series of articles are by Al Brogdon, WIAB. Credit: **The ARRL Letter** and The American Radio Relay League.*





CQ Amateur Radio Hall of Fame

(Editors note: Ralph Showers, ex-W3GEU is WA3PZO's uncle.)

The CQ Amateur Radio Hall of Fame honors individuals, whether licensed or not, who have made significant contributions to Amateur Radio as well as radio amateurs who have made significant contributions to Amateur Radio, to their professions, or to some other aspect of life on our planet. Several of this year's inductees are being honored posthumously. The 2014 CQ Amateur Radio Hall of Fame inductees are:

Clifford Berry, W9TIJ (SK), who helped usher in the computer age as co-inventor of the Atanasoff-Berry computer (or ABC), the precursor of virtually all electronic computers.

Warren Bruene, W5OLY (SK), prolific radio designer and innovator who designed many Collins radios and helped the company introduce single-sideband voice communications.

John Huntoon, W1RW (SK), former ARRL General Manager, *QST* Editor, who helped bring about the international 30, 17 and 12 meter allocations.

Mike Koss, W9SU (SK), DXer and DXpeditioner; founder and owner of filter manufacturer ICE (Industrial Communications Engineers); key player in establishment of Indianapolis Motor Speedway Amateur Radio Club, W9IMS; organizer of special event station W87PAX at 1987 Pan American Games in Indianapolis.

Nancy Kott, WZ8C (SK), former Editor of *WorldRadio* and *WorldRadio Online* and tireless promoter of Morse code as US coordinator of the FISTS CW Club.

Paul Laughton, AC6B (ex-N6BVH), software designer, whose accomplishments include

developing Apple's disk operating system and Atari's operating system.

Ralph Showers, ex-W3GEU (SK), expert on electronic interference and leader of efforts to set national and international standards for electromagnetic compatibility (EMC). He holds several awards from the American National Standards Institute (ANSI) and the Institute of Electrical and Electronics Engineers (IEEE).

Steve Wozniak, ex-WV6VLY and ex-WA6BND, co-founder of Apple Computer

ARRL: FCC Okays Changes to Amateur Radio Exam Credit, Test Administration, Emission Type Rules

In a wide-ranging Report and Order (R&O) released June 9 that takes various proceedings into consideration, the FCC has revised the Amateur Service Part 97 rules to grant credit for written examination elements 3 (General) and 4 (Amateur Extra) to holders of "expired licenses that required passage of those elements." The FCC will require former licensees - those falling outside the 2-year grace period - to pass Element 2 (Technician) in order to be relicensed, however. The Commission declined to give examination credit to the holder of an expired Certificate of Successful Completion of Examination (CSCE) or to extend its validity to the holder's lifetime. The Report and Order may be found on the web in PDF format at, http://transition.fcc.gov/Daily_Releases/Daily_Business/2014/db0609/FCC-14-74A1.pdf

HOLMESBURG AMATEUR RADIO CLUB

3341 Sheffield Ave., Philadelphia, PA 19136

“Serving the Community Through Ham Radio”

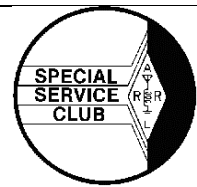
June 19 Meeting – Field Day/13 Colonies



**HOLMESBURG AMATEUR RADIO CLUB
2014 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 # _____ Would you be willing to receive the newsletter via email? ____

E-mail _____

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