

February 2012

# 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>



***Repeater Update! 2012 Speakers! Special Events! And Much More***

## Repeater Update!

Upgrades and repairs continue to be made on HARC's repeater. In the past month work has been done on the Abington site. A new 440 receiver and transmitter have been installed and work is scheduled to take place at the Northeast site this week.

### Temple site:

Our primary contact at Temple Hospital has changed positions and there has been a change in the administration with the group we have been working with. We are maintaining contact with the Hospital and hope that things will work out.

### Help needed:

Earlier we reported that the repeater upgrade project would cost close to \$3000. While the Club has some funds available, it's not enough to take care of all of the upgrades. We are looking for donations to help pay for the upgrades. This is your repeater system. Contributions can be made payable to HARC and sent to HARC, 3341 Sheffield Ave, Philadelphia, PA 19136. So far almost \$1400 has been donated in cash and equipment towards the repeater. More donations are expected, but your help is needed. If you have any questions contact Mike, N3LXN, Bob, WA3PZO, or Ron, K3RJC.



**HARC Speaker  
February 24 8 PM  
Near Vertical Incident Skywave  
(NVIS) Antennas  
Mark Rothstein, KC3JV  
8<sup>th</sup> District Police Station  
Academy & Red Lion Rds**

Near-Vertical Incident Skywave ("NVIS") is a theory of radio propagation using F-Layer atmospheric refraction around 65° to 90° enabling low-power local and region communications within a radius of 300 to 400 miles.

NVIS should be viewed as a system, in the sense that stations which are similarly equipped will be able better to communicate within the range of the system. Stations outside the range of F-Layer refraction, which would be emphasized by a low elevation pattern, are de-emphasized with the high-elevation pattern NVIS system. The "system" consist of the NVIS antennas (all with high-elevation patterns), the operator's knowledge, skill, and experience.

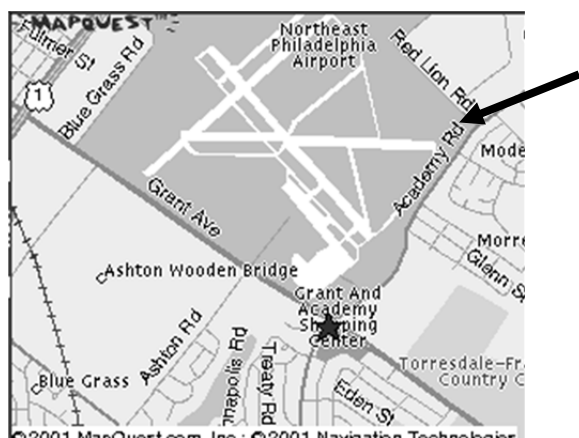
NVIS antenna systems were pioneered by the Germans in WWII, and were known as "rail" or "cage" antenna.. NVIS systems were widely used by the US forces in Vietnam. NVIS is now being studied, promoted, and deployed by ARES and other emergency communicators for use in terrain where line of sight V/UHF communications is not possible.

NVIS systems have a reliable range within a radius of 300 to 400 miles using low power (5-100 watts) transmitters.

## HARC Board of Directors

President - Mike Wurgley, N3LXN  
Treasurer - Bob Josuweit, WA3PZO  
Membership - Charley Johnson, K3CJ  
Technical - Ron Cardullo, K3RJC  
Member-at-Large - Sol Volen, N3UBY  
Webmaster - Rich Shivers, AB3EO  
UPARC Rep - Mike Feeley, KB3NDC  
Newsletter Editor - Bob Josuweit, WA3PZO  
WM3PEN @ AOL.COM

H.A.R.C. Monthly Meetings - The Board of Directors meets on the 2nd Thursday @ 7:30 PM (Odd number months). General meetings are held the 4<sup>th</sup>. Thursday @ 8:00 PM. 8<sup>th</sup> District Police Station, Red Lion & Academy Rd. Phila PA. No meeting in August.



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.

## 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))

## HARC Bulletin Schedule

### Bulletin Station K3CJ

Wed 2000L Amateur Radio News Line  
ARRL Audio News  
The RAIN Report  
Contests / Special Events / Hamfests  
Sun 1000L This Week In Amateur Radio  
Gate Way 160  
Handy Hams  
Contests / Special Events / Hamfests

## 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)

**Keep up on the latest HARC news by checking out the Club website [www.HARCNET.org](http://www.HARCNET.org)**

## Upcoming Events

**Next Club Meeting: January 26  
Software Defined Radio**

## 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.

HARC Award Manager Bob Josuweit, WA3PZO said there was a need to have a County Challenge in Pennsylvania that was within the reach of most hams in Pennsylvania. When other state awards lost their sponsorship it was an opportunity for the Holmesburg Amateur Radio Club to fill the void.

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

## 2012 Meeting Topics

**February** – NVIS Antennas

**March** – Field Day Preparation

**April** – Dxpedition – T32C Christmas Island

**May** – Field Day/13 Colonies Special Event

**June** – TBD (after Field Day)

### HARC Theme Nights



The idea of theme nights has taken off and we have topics for many of our meetings. So far we have technical, antennas, dxpeditions, contests, and special events. We also have some additional leads on SWL, QRP, and CW.

Here are some other possible themes: Net Protocols and Methods, Emergency Communications, Digital Modes, Foxhunting, Lightning Protection, Mobile Operation, VHF / UHF Systems,.....How Stuff Works, New Toy Demos.

Hopefully you get the idea. Feel free to suggest themes or, better yet, **volunteer** to lead a theme. Remember that this does NOT commit you to creating a viewgraph presentation, it's ok to just stand up and talk, demo something or whatever you want to do. Have an idea for March or June let us know.

### Montgomery Co RACES Hosts Radio Class.

Montgomery County RACES will host a 2 day getting started in ham radio class on March 10 and 11 at the Montgomery County Public Safety Training Center in Conshohocken. Preregistration required. Contact Doug Priest, W3CF at [mcartest2012@verizon.net](mailto:mcartest2012@verizon.net) or 215-356-2903

## HARC Celebrates Pennsylvania's 331<sup>st</sup> Birthday

On March 10 and 11, HARC will celebrate Pennsylvania's 331<sup>st</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  
both days from  
1300Z – 2359Z as  
band conditions  
permit. A special  
QSL card will be  
offered. This is a  
good opportunity to  
get ready for the 13  
colonies special

event June 30 – July 5<sup>th</sup>.

If you are interested in operating during the special event contact WA3PZO.



The **ORIGINAL**  
"Social Network"

**Ham Radio!**

[www.Hello-Radio.org](http://www.Hello-Radio.org)

## UPCOMING WEBINARS

If you are interested in a computer logging programming or digital contesting, you may find these webinars hosted by the Potomac Valley Radio Club (PVRC) of interest:

Title: N1MM Logger in Depth: Part 1 - Overview  
Date: Tuesday, February 28

Time: 9 PM EST (Wednesday, February 29 - 02:00 UTC) Registration (free):

<https://www2.gotomeeting.com/register/611548330>  
(registration link also posted on [www.pvrc.org](http://www.pvrc.org) under the Upcoming Webinars link)

Part one of a two part series provides a overview of the N1MM logging program. Series presenters include:

Pete Smith N4ZR  
Steve London N2IC  
Larry Gauthier K8UT  
Rich Ferch VE3KI

Title: N1MM Logger in Depth: Part 2 - Digital Modes and Multi-Op

Date: Tuesday, March 6

Time: 9 PM EST (Wednesday, March 7 - 02:00 UTC) Registration (free):

<https://www2.gotomeeting.com/register/222788522>  
(registration link also posted on [www.pvrc.org](http://www.pvrc.org) under the Upcoming Webinars link)

Part two of a two part series provides a overview of the N1MM logging program. Series presenters include:

Pete Smith N4ZR  
Steve London N2IC  
Larry Gauthier K8UT  
Rich Ferch VE3KI

Title: Getting Started In Digital Contesting

Date: Sunday, April 1

Time: 3 PM EDT (19:00 UTC)

Registration (free):

<https://www2.gotomeeting.com/register/982837010>  
(registration link also posted on [www.pvrc.org](http://www.pvrc.org) under the Upcoming Webinars link)

Steve Ford, WB8IMY, QST Editor / Publications Manager provides a beginner-level introduction to digital contesting with a discussion of equipment requirements, software and techniques.



(via ARRL)

### **WHAT IS FIELD DAY?**

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.

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 walkathons; 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.

## **Winter SWL Fest March 1-3, 2012, 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 25, 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 2012, its 25th Anniversary, the Winter SWL Fest will have three 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. ([www.swlfest.com](http://www.swlfest.com))



HOLMESBURG AMATEUR RADIO CLUB  
3341 Sheffield Ave., Philadelphia, PA 19136  
"Serving the Community Through Ham Radio"

Club Meeting – February 23 – NVIS Antennas

	<p><b>HOLMESBURG AMATEUR RADIO CLUB</b> <b>MEMBERSHIP FORM</b> HARC, 3341 Sheffield Ave, PHILADELPHIA, PA 19136 <a href="http://www.harcnet.org">http://www.harcnet.org</a> WM3PEN/K3FI</p>	
<p>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.</p> <p>NAME _____ CALL _____</p> <p>ADDRESS _____</p> <p>City, State, Zip _____</p> <p>Telephone # _____ Would you be willing to receive the newsletter via email? ____ E-mail _____</p> <p>Are you an ARRL member? YES NO Membership Expires (mm/yy) _____</p>		