



January 2013

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>



***HARC IS RADIO ACTIVE!
2012 – A YEAR IN REVIEW
2013 – A LOOK AHEAD
January 24, 2013 Fun with SDR FUNcube***

New Repeater Antenna Installed

A new antenna was installed at the main repeater site in November. The antenna has a higher gain than previous antennas used at the site. Various reports indicate that the repeater is much stronger in areas and can be heard greater distances. Thanks to the install crew of Ron, K3RJC, Mike, N3LXN, Carl, N3ZZK. and Chris, KC2ISV. Funding for the antenna was a direct result of many donations during the year. Many thanks to all.



January 2013 HARC Meeting

Fun with the SDR FUNcube
Dennis Silage, K3DS, Professor
Electrical and Computer Engineering



The FUNcube Dongle is a software defined radio (SDR) that fits into a 'USB key' and is part of AMSAT-UK's FUNcube satellite project. The FUNcube Dongle allows anyone to try their hand at reception of satellites like the FUNcube, due for launch in November 2012, as part of a global educational collaboration project collecting information from space.

The FUNcube Dongle has a frequency range of 64 MHz to 1.7 GHz (there is a gap between 1.1 GHz and 1.27 GHz) and with the PC decoding software can receive narrow band signals including AM, FM and SSB. The FUNcube Dongle will be demonstrated for a 'hands-on' experiences. For more information, see: www.funcubedongle.com and <http://funcube.org.uk>

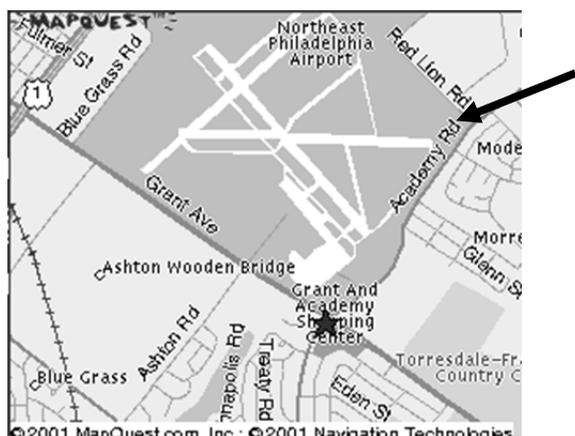
**HARC January 24 Meeting
8th District Police Station
8 PM**

**Topic:
SDR FUNcube**

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 4th. Thursday @ 8:00 PM. 8th 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, 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)

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

Keep up on the latest HARC news by checking out the Club website www.HARCNET.org

Upcoming Events

Next Club Meeting: January 24

SDR FUNcube

HARC – Year in Review 2012

By Bob, WA3PZO

Wow! What a year...As I was thinking about everything HARC has done over the past year, I started to make notes of the Club's accomplishments and was just blown away by everything that the Club did in 2012. Of course it's the membership that made it happen. To that end a big thank you!

We started the year with the possibilities of adding a repeater site at Temple University Hospital. We started to raise additional funds to make a move and site additions possible. While the fund raising was successful, a change in management and key contacts at TUH dashed any hope for including TUH as a HARC site. We also reestablished our contact with the University of Pennsylvania. Many thanks to Ron, K3RJC, as well as our friends in the U of P ARC Alumni (especially WA3FRP) During the year the amplifier was repaired and 2 of the remote input sites were upgraded and improved. We also installed a new antenna at the main site. All of the repeater upgrades and repairs were under the leadership of K3RJC. Thanks Ron!

As a Club we have been busy. Early in the year our ARRL Special Service Club status was renewed. We have monthly meetings, good programs, a weekly net (K3CJ), a newsletter (WA3PZO), website (AB3EO), a great quartermaster (food provider – N3UBY), fellowship with Field Day, a picnic, and a December holiday dinner.

We introduced ourselves and the Club to new hams, to others at the Warminster Hamfest, and to others via our website and pr efforts such as the Field Day story on KYW NewsRadio. We also assist our members and other hams in the Philadelphia area by checking their qsl cards for awards such as the ARRL Worked All States and the ARRL VHF Award. HARC also sponsors the PA 67 Challenge which introduces the Club to hams around the country.

We keep active in the community by supporting the NE Philly Youth Run and this year we signed a formal Memorandum (MOU) with the Philadelphia Amateur Radio Emergency Service (ARES). Currently HARC provides space for the Phila ARES website.

HARC was on the air! In March WM3PEN participated in Charter Day in celebration of when William Penn was given the Charter for Pennsylvania. We also participated in the CQ WPX SSB contest.

In June K3FI was on the air for Field Day. Just a week later WM3PEN was on the air until July 7th participating as the bonus station for the 13 Colonies Special Event with a combination of over 1500 paper qsls, Eqsls, and Logbook of the World contact confirmations.

In September WM3PEN made some contacts in the CQ WW DX SSB contest and in October we participated in the Club category in the School Club Roundup contest. We introduced the Club, Philadelphia, and William Penn to schools that have amateur radio clubs. Results will be announced near the end of January, but based on past contests I think we'll be in the top 5.

HARC renewed its membership in the Ten-Ten International Net, or 10-10 for short. It is an organization of amateur radio operators dedicated to maintaining high levels of amateur radio communications on the 10-meter amateur band.

HARC also took a ride to MARS courtesy of NASA and the MARS rover Curiosity. WM3PEN is on Curiosity's back traversing the MARS landscape.

Finally HARC received several awards and certificates during the year. Most were a result of WM3PEN being on the air for the 13 Colonies event.

Awards

ARRL – WAS
CQ WPX – w/NA Endorsement
USA – Counties Award Honor Roll #3594

PA Keystone Award
PA 67 Challenge
eDX for 25 countries

Certificates

Strabane Amateur Radio Society (Ireland) – Birth of John Dunlap
150th Anniversary Battle of Prairie Grove
Arkansas
Council for the Advancement of Amateur Radio in the New York City Schools.

HARC – 2013 The Year Ahead

We start off the year with an interesting meeting on the FunDongle. We'll be looking of other meeting topics as the year progresses.

We didn't come up with a date to build the Altoids cw key. We need someone to pick up that project.

We hope to participate in the School Roundup Contest this year. It is held in February and October. In March we'll have Charter Day, June – Field Day, and July – 13 Colonies. There are many other contests and events that we can participate in. If you have an idea let us know.

There are possibilities of expanding HARC's involvement with 10 meter activity and even with the Quarter Century Wireless Association.

Interested in getting involved. We'll have elections in March for Club Officers; President, Vice President, Secretary, Member-at-Large. Board meetings are held on the 2nd Thursday of odd numbered months. Other months are handled as necessary by email or phone.

Maybe you want to work on a specific project or committee. If you have any questions or ideas contact WA3PZO.

HARC Celebrates Pennsylvania's 332st Birthday

On March 9 and 10, HARC will celebrate Pennsylvania's 332st 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 July 1 – July 5th.

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

School Club Roundup

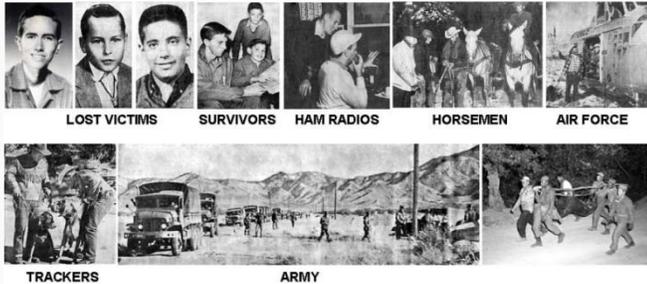
Objective: To exchange QSO information with club stations that are part of an elementary, middle, or high school or college. Non-school clubs and individuals are encouraged to participate.

The Winter/Spring term event is February 11-15, beginning at 1300 UTC and ending at 2359 UTC.

A station may operate no more than 6 hours out of 24 and may not count more than a total of 24 hours of the 107 hour event.

Lost Scouts lead to modern search and rescue

A day hiking in the mountains lead to an unfortunate tragedy for 3 Boy Scouts and the start of the search and rescue movement. And of course...ham radio was there.



(<http://www.arizonamtn.com/>)

Saturday November 15, 1958

Just outside of Tucson, Arizona a group of boy scouts planned to hike to the Ranger Cabin on top of Mt. Baldy (Mt. Wrightson), sign the log book and then return the next day for a birthday party. Their scoutmaster advised against hiking in November, but it was a warm and sunny day so they decided to go.

They started hiking up the side of Mt. Baldy about 10:00 A.M. and climbed steadily until midafternoon when Ron Sepulveda (12) developed blisters and became exhausted and unnerved by the high altitude. They were on the Baldy Trail above Josephine Saddle at this time. He decided to wait by the trail until the others returned. The rest of the group hiked for about 20 minutes and then Ralph Coltrin (12) decided to drop out and wait. The other four continued on for about 20 more minutes when they saw the top of Baldy ahead. At that point, Louis Burgess (16) decided to turn back also out of concern for the two younger boys who had started back down the mountain. The other three, Mike Early (16), David Greenberg (12) and Michael LaNoue (13), elected to continue on because they were so near their goal. LaNoue was dressed the warmest of the three. He had three or four sweaters along with

his jacket while the other two just wore jackets. Both Early and LaNoue carried waterproof matches and some K-ration malt tablets.

Burgess caught up with Sepulveda and Coltrin and the three made it back to their camp in Madera Canyon just before nightfall. They erected their tents and crawled into their sleeping bags. It started raining in the Canyon at dusk and around midnight, the rain turned to snow. It is unknown when it started to snow higher up on the mountain.

Sunday, November 16 - Sometime after midnight, the three boys (Burgess, Coltrin and Sepulveda) tried to start a fire to ward off the cold but couldn't find any wood because of the snow. Somehow Sepulveda lost his shoes in the darkness. The snow buried them and the boys were unable to find them in the morning. Burgess decided to go down to the Santa Rita Lodge for help. While en route, he met

Early's father who was on his way up the canyon to meet the boys. The two returned to the boy's camp and escorted Sepulveda and Coltrin back to the Lodge. Sepulveda ran the mile to the Lodge in his bare feet. Bruce LaNoue, Michael's father, became concerned when he awoke to find heavy snow in Tucson (a record breaking 6.5 inches according to the newspaper) and drove to Madera Canyon to check on the boys. He put on chains and loaded heavy rocks in the bed of his truck for traction and managed to make it to the Santa Rita Lodge. By this time, the heavy snow had closed the road into the canyon and trapped everyone there.

A ham radio operator, Val Hanson, lived in the canyon about a mile from the lodge and he broadcast the first alert about the missing boys from the radio in his cabin about 11:00 A.M. The message was heard by Orville Blair who contacted the Pima County Sheriff's office and then notified Dale Adams who put into operation the Catalina Emergency Net, an alert system for members of the Catalina Radio Club. Hanson's next broadcast was from a portable radio in his car which was heard by radio operators throughout the U.S. They, in turn, called local authorities by radio and long distance phone calls. The amateur radio operators of Catalina and Old Pueblo Radio Clubs

went into action. They rushed a portable radio with a gasoline generator to Santa Rita Lodge Sunday night and maintained vital communication facilities between searchers on the mountain side in planes and helicopters aloft and the office in Tucson. Whitney declared an emergency and the 34 or more local operators took over the 29.62 megacycles Catalina network and the 38.65 mhz network to support the hunt for the lost youths This meant other amateurs across nation had to stay off these bands under penalty of the law They could listen in but could not send messages. The 34 kept the nets going 24 hours a day Monday and Tuesday One man was on duty continuously for 102 hours At the scene were as many as 20 operators at one time or another.

According to the Tucson Daily Citizen, the Rev George C Whitney, emergency coordinator of amateur radio activity for the American Red Cross Disaster Committee in Tucson withdrew local amateur operators from the search five days after the Scouts went missing. He said he terminated the declared emergency and returned the two wave bands to normal use by operators across the nation because other channels have been opened. With the organized search now going on in the Santa Rita mountains the National Guard, Ft Huachuca Army Signal Corps, Davis-Monthan airmen, and the sheriff's office moved portable communication systems to the scene.

The boys' bodies were found and removed from the mountain. Following the tragedy, search and rescue training moved from extracting people from collapsed buildings in towns to riding horses, rappelling from helicopters, first aid, and using a radio. Common radio channels were established in the mountains. It was the start of the modern search and rescue team. (There were amateur radio frequency changes in the 50s.)



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.

Amateur radio 70 years ago this month,

Jan 1943

Tue Jan 1, 2013 12:59 am (PST) . Posted by:

["military.radioman" military.radioman](#)

The Civilian Defense Corps is on the upswing in applying for War Emergency Radio Service licenses. Last month we reported 53 licenses with more pending. Since that time more licenses have been issued with more pending.

Of the 22 states containing municipalities who have licenses, 17 are in so-called "coastal" areas, 6 are inland. WERS licensing in coastal areas was and is the most important, inasmuch as these areas are the most likely to receive the initial attention of enemy bombing missions. Records indicate that of the 6 states in the coastal area in which no WERS licenses have been granted, 5 have stated action in that direction. Of the 19 inland states that have no WERS licenses, 12 have started action while nothing has been heard from the remaining 7. It is time for the inland areas to become aware of the necessity for setting up precautions to combat enemy action. European experience has shown that enemy action in the form of internal saboteurs strike hard in the least expected areas. Communications is one of the first things they strike at. Only 8 states Civilian Defense Corps are entirely unrepresented by any action toward WERS licensing. They are Mississippi, North Dakota, Oklahoma, Arkansas, Wyoming, Idaho, New Mexico and Nevada.

The Civilian Defense Corps and the FCC have announced standard frequencies for 112-116 Mc band which is divided into four segments. The first segment is for the top main base stations. The first segment is called "LD", local base stations to district base stations, 112.0 to 112.8 Mc. The second segment is called "LF", Local fixed stations to other local fixed stations, 112.8 to 114.0 Mc. The third segment is "LM" segment for local base stations to local mobile or portable stations, 114.0 to 115.2 Mc. The last segment is called the "CAP" segment, 115.2 to 116.0 Mc and is reserved for the Civil Air Patrol division of the Civilian Defense Corps. The channel center frequencies are:
LD segment 112.1, 112.3, 112.5 and 112.7 Mc

LF segment 112.9, 113.1, 113.3, 113.5, 113.7 and 113.9 Mc -- LM segment 114.1, 114.3, 114.5, 114.7, 114.9, and 115.1 Mc --CAP segment 115.3, 115.5, 115.7 and 115.9 Mc

The Aircraft Warning Service of the Civilian Defense Corps may have to start to become more active as the production starts on Japanese "America bomber", the Fugaku in Jan 1943. The Fugaku had its origins in "Project Z", a 1942 Imperial Japanese Army specification for an intercontinental bomber which could take off from the Kuril Islands, bomb the continental United States, then continue onward to land in German-occupied France. Once there, it would be refitted and make another return sortie.

Project Z called for three variations on the airframe: heavy bomber, transport (capable of carrying 300 troops), and a gunship armed with 40 downward-firing machine guns in the fuselage for intense ground attacks at the rate of 6,400 rounds per second. While the project was conceived by Nakajima head Chikuhei Nakajima, Kawanishi and Mitsubishi also made proposals for the Fugaku. The Nakajima design had straight wings and contra-rotating four-blade propellers; the Kawanishi design had elliptical wings and single four-blade propellers. To save weight, some of the landing gear was to be jettisoned after takeoff (being unnecessary on landing with an empty bombload), as had been planned on some late-war German very long range bomber designs. Both designs used six engines. Development started in January 1943, with a design and manufacturing facility built in Mitaka, Tokyo. While Nakajima's 4-row 36-cylinder 5,000 hp Ha-54 (Ha-505) engine was abandoned as too complex, Mitsubishi successfully built the 2-row 22-cylinder Ha-50 engine for the Kawanishi design, testing three units in May 1944. An example of this engine was unearthed in 1979 during expansion of Haneda Airport and is on display at the Narita Aerospace Museum. Project Z was cancelled in July 1944, and the Fugaku was never built.

On the warfront, the Casablanca Conference (codenamed SYMBOL) was held at the

Anfa Hotel in Casablanca, Morocco, then a French protectorate, from January 14 to 24, 1943, to plan the Allied European strategy for the next phase of World War II. In attendance were United States President Franklin D. Roosevelt, British Prime Minister Winston Churchill, and representing the Free French forces, General Charles de Gaulle, and General Henri Giraud. Premier Joseph Stalin had declined to attend, citing the ongoing conflict in Stalingrad required his presence in the Soviet Union. The conference agenda addressed the specifics of tactical procedure, allocation of resources and the broader issues of diplomatic policy. The debate and negotiations produced what was known as the "Casablanca Declaration," and what is, perhaps, its most historically provocative statement of purpose, "unconditional surrender." The doctrine of "unconditional surrender" came to represent the unified voice of implacable Allied will—the determination that the Axis powers would be fought to their ultimate defeat and annihilation.

Amateur Radio 70 Years Ago this Month" is a monthly feature during the 70th anniversary years of WWII. Past monthly posts can be found on my W.E.R.S Yahoo group at:
http://groups.yahoo.com/group/war_emergency_radio_service

Brave Radio Friends: Radio Activity Award January 2013 WORK 20 DXCC Entities

The award is sponsored by BRAVE RADIO FRIENDS and can be applied for by amateur radio stations or short wave listeners. The rules are simple: In January 2013 work (OP) or hear (SWL) as many DXCC-entities as possible. No band or mode restrictions. All entities count only once, regardless of band or mode. For the award a minimum of 20 DXCC-entities is required. The number of DXCC entities worked/heard will be entered in the award.

Application with log extract (please pdf, doc, xls or jpg). Deadline of the application is February 28, 2013. You can only apply for a pdf-version of the

award and there is no fee. Send your application by e-mail to: de3ear@dar.c.de

Santa Claus Land Contacted

While children were awaiting the arrival of the jolly old man, WA3PZO was in contact with his home base. You see it's said that Santa lives at the freezing North Pole, leading a harsh but exciting life under the Northern Lights (Aurora Oval). But no one has actually thought about Santa's specific location – there is no such DXCC entity as North Pole in the world – at least not yet.

Now much to everyone's delight, Santa's location is clearly marked on all maps. Santa lives in the Santa Claus region of Finland. That is Lapland, OH9 district, situated north of the Arctic Circle, amid the barren tundra where reindeer run wild. In December, the locals do not see daylight – it is dark all day. As compensation Mother Nature has created a distinctive polar path on 20 meters to North America.



WA3PZO worked OF9X in Lapland. He also made contact with PA12XMAS in the Netherlands.

**Happy New Year
to All!**

What would a vacation be without a stop at an amateur radio manufacturer?

Beth and Bob, WA3PZO, spent a week at the base of the Smoky Mountains in Tennessee. Of course along the way there had to be a stop involving ham radio. Eastern Tennessee is home to Vibroplex (telegraph keys) and TenTec radios. We stopped in Seiverville, TN home of Tennessee Technologies or TenTec. TenTec was easy to spot with the triband beam on the front lawn. Inside the "ham shack" attached to the lobby showroom features 4 HF operating radios, a yagi for 6 meters, a rotary 10/15/20 meter triband beam antenna on a tower and low band dipoles. We tried out the Omni VII HF + 6 Meter radio to various qrp radios.

We decided not purchase any radios onsite because of the 9.75% Tennessee Sales Tax, but might consider one down the road. More info on Ten-Tec can be found at www.tentec.com.





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

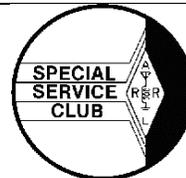
Club meeting: January 24



**HOLMESBURG AMATEUR RADIO CLUB
2013 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 April 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) _____