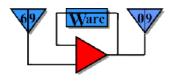


# FEEDBACK



Web Site k3dn.org

Warminster Amateur Radio Club

August 2010

## Next Meeting August 5 - Solar Power systems for the average home



#### President's Message

#### The QSL Niche and you

Amateur Radio has many niches of interest that are open for everyone to explore and dabble. The niche I wanted to mention here is the activity of sending and receiving confirmation QSL's.

Now that you may be contacting stations outside your immediate area, how do you have these contacts confirmed? As a radio operator, you want to verify how far your signal is heard. You may request listeners to send a card via postal mail to document where and when his signal was heard. This process of sending contact confirmation is called QSL, and the post cards are called QSL cards.

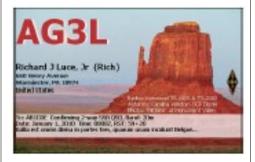
The process has evolved considerably over time. The actual process of sending and receiving QSL cards involves many volunteers in many countries. Without those volunteers, the whole process may be cost prohibitive.

Before you get started, you will need to design your own QSL card. These designs can be simple or elaborate depending on cost, and your wishes. Today there are online cards which can be printed on your printer at home. I



chose to do the layout artwork myself and then sent the card to a printer because the final product would be so much nicer. As far as a favorite card, I always liked the QSL card above from Bob / KK5RT in Roswell, NM. Bob's card shows a flying saucer which is a play on the UFO stories of 1947 in his hometown – which by the way Bob believes were a hoax.

On your QSL card, you should have the station's callsign, the name of the operator, or club name, the grid square, your address, the county, information on your station setup, the signal report, and most cards today also list the email



of the operator. In addition, many list organizations they belong to including: ARRL, Quarter Century Club, MARS, European PSK Club, or whatever you wish. Many also show a photo of their shack or antenna array. Don't forget, the card is meant to put you, your station, and your community out to the greater amateur community in a positive light.

There are 3 basic ways to confirm a contact:

Printed and Mailed QSL Cards – Using a printed QSL card (as previously described) you mail the cards via US Mail to the stations in the United States with a stamped, self-addressed return envelope (a common courtesy). When sending

cards to stations outside the US, you can mail direct with a selfaddressed envelope and an international mail coupon – this can be very expensive. If you are an ARRL member, the easier way is to use the outgoing and incoming QSL Bureaus. More about how the bureaus work later.

E-QSL Cards – Sending physical cards out can be pricey. You have the cost of printing, postage, and running to the post office to mail them. The alternative is to send electronic cards. Volunteers got together and started the eqsl.cc program which tracks your contacts and issues awards. The downside to EQSL is that contacts confirmed this way are not recognized by the ARRL. However, EQSL has parallel awards to the ARRL awards.

The EQSL program and service is free – but they do appreciate donations to help underwrite the cost. I designed QSL card shown to the left, and it gets automatically filled out and sent to those contacts that I upload.

My EQSL card shows a stone monolith called "mittens" which is on the Navajo Reservation in Monument Valley, UT where we visited last

(Continued on page 2)

The Warminster Amateur Radio Club is a volunteer-based organization. Without the selfless work performed by volunteers such as yourself, there would be no Club.



Page 2 FEEDBACK

#### **PROGRAMS**

**August 5, 2010** – Solar Power systems for the average home owner

Hugh Pepper (KE3BI) and Ken Nicely (NE3C) will talk about the basics of solar power systems.

September 2, 2010 – Contesting

Mark (N3GNW), Irwin (KD3TB) and Andy (KD3RF)

October 7, 2010 – Presentation by Rich (AG3L) on Army MARS (Military Auxiliary Radio System)

November 5, 2010 - Ham Radio Outlet RICK LAMB (K3TL).

December 2, 2010 - Annual Warminster ARC Dinner.

(Continued from page 1) September.

#### Logbook of the World (LOTW) -

This is a program run by the ARRL which logs both your contact information, and the other radio operator's contact information independently. If there is a match between your information and the other station's information, then you both get credit for a confirmed contact. This is a free program, until such time that you submit for an award. Then you are charged a nominal fee for those contacts tracked by LOTW.

LOTW is a slick program, and saves costs and time. During the process of writing this article, I made my last contact (Alaska) for the Worked All States award. In re-checking my confirmations, 42 were on LOTW and 8 were by the US Post Office. So I will pay roughly \$0.25 per contact via LOTW or \$10.50 to ARRL. I've been using it for 2 years and it hasn't cost me anything.

Incoming and Outgoing QSL Bureaus Earlier I mentioned that the QSL system may be cost prohibitive if we didn't use volunteers. All across the US there are incoming QSL bureaus staffed by volunteers. The main job that these hams perform is to process the millions of QSL cards coming back into the US from the non-US bureaus. Each US call district has its own bureau. Our bureau for district 3 is the National Capitol DX association in Clinton, MD.

If you regularly use the bureau, you will preposition about 10 empty

stamped envelopes there. When they received QSL cards from the foreign bureaus for you, they go to Maryland first. When your selfaddressed stamped envelopes fill up, the are then mailed to you. This cuts costs for you dramatically.

Our outgoing bureau is at ARRL Headquarters in CT. The outgoing service is for ARRL members only. When you fill out your cards to foreign stations, send them to ARRL for a nominal fee and they do the rest. Be aware that the QSL bureaus are for foreign stations only. For US stations you will use LOTW, US Post Office, or EQSL. Well that's the story on QSL cards and how they get to their destinations. If you have any questions, many of the club members are active DX'ers and will be happy to help. Rich / AG3L

#### Warminster Amateur Radio Club General Meeting Minutes July 1, 2010

Meeting was called to order by the Vice-President, Irwin (KB3TB) at 7:35 pm.

#### INTRODUCTIONS:

## MINUTES FROM THE June 3, 2009 MEETING:

A motion was made, seconded and unanimous vote to accept them as printed in the Feedback Newsletter.

## TREASURER REPORT- James (K3JSR):

As given

#### **COMMITTEE REPORTS:**

## MEMBERSHIP- Mark (WA3QVU) and Michelle (KB3MTW):

There are currently 126 paid-up members. Every member is also encouraged to join the ARRL. The club must have at least 50% of its members as ARRL members to keep the WARC's affiliation. ARRL annual membership dues are \$39.00.

## <u>PUBLIC SERVICE – George</u> (N3HBT):

Nothing until the Polish-American Fest on Labor Day Weekend.

#### CLASSES:

Starting September 13<sup>th</sup> there will be a class upstairs for the Technician Class license taught by George (KA3WXV).Books are available at cost from the club.

#### REPEATER - Brian (N3EXA):

The Hilltown repeater is off-line. It is at 670' (100' from ground). We need our own antenna for this repeater.

He might be working on Echolink.

#### FIELD DAY – Mark (AA3K):

**Band Captains:** 

160m None

80m/10m KA3YCG

40m WI3Z

 $20m\ KD3TB$ 

15m K3ZMA

6m WA3JZN

VHF/UHF KB1JEY

Satellite K3BFS

GOTA K3KH & WD0ESL

So Field Day Class will be 4A (GOTA, VHF & 6m may be free

extras. Satellite ??)

#### After Action For Field Day

Six stations (including V/UHF) =>

(Continued on page 3)

FEEDBACK Page 3

(Continued from page 2)

4A

1700 QSO's

Ice cream sundaes at midnight (Closer to 10:00 pm)

One pizza

AA3K's XYL was cook. Food was great.

#### Bands:

2 Mtr/6 Mtr – Only 30 contacts on 2 Mtrs. Guy (WA3JZN) would like to take over 10 Mtrs.

15 Mtrs (CW) - 613 QSOs - Dave would like to change the station location.

Satellite – Rich (K3BFS) 2 QSOs, Full Duplex. Must change the station location so noise from others doesn't interfere.

We need band pass filters for all frequencies. Traps for all bands cost about \$ 36.

20 Mtrs (CW) – Caused some interference with 20 Mtr Phone. Antennas were facing each other.

20 Mtrs (Phone) – Gary Pepper (KB3TIF) – General (Less than 13 yrs old) and his brother (about 10 yrs old) - Hugh Pepper's (KB3BI) sons as well as Marty (AA3K's son).

40 Mtrs – Al(WI3Z) -470 QSOs. Three element wire beam was aimed at the 15 and 20 Mtr stations.

75 Mtrs – Al (KA3YCG) – 343 QSOs – Used an inverted V bazooka antenna.

#### PROGRAMS- Rich (AG3L):

August 5, 2010 - Solar Power

September 2, 2010 – Mark (AA3K), Irwin (KD3TB) and Andy (KD3RF) on Contesting.

October 7, 2010 – Presentation by Rich (AG3L) on Army MARS (Military Auxiliary Radio System).

November 5, 2010 - Ham Radio Outlet RICK LAMB (K3TL).

December 2, 2010 – Annual Warminster ARC Dinner.

## GOOD and WELFARE- VINCE (KD3TC):

All cards have been sent out. Everything is up to date.

#### **OLD BUSINESS:**

Irwin (KB3TB) sent out a WARCtalk message describing what meeting program would be.

Rich (AG3L) talked about next year's budget. It has been approved by the board. He will bring copies to the next meeting.

50/50:

Adam (KB3JCP)

**NEW BUSINESS:** 

**None** 

#### TONIGHT'S PROGRAM:

Geocaching by Mark (AA3K).

Submitted: WDØESL, Club Secretary July 14, 2010

## **PUBLIC SERVICE POLISH – AMERICAN FEST** – Bert (N3YVH):

The Fest will be held September 4, 5, and 6 then 11 and 12 (Labor Day weekend and the following weekend.

#### **CLUB STATION**

The WARC club station is open to anyone with an interest, on Tuesday evenings between the hours of 7:00 and 9:00 pm. For further information, call George Brechmann N3HBT at 215-443 -5656.

#### WARC ALUMNI MEMBERSHIP

Attention all former WARC members. At the March 4, 1999 General Meeting, revisions to our club's constitution were approved that among other things, establishes a new Alumni membership category for former WARC members who are unable to attend meeting and Club activities on a regular basis due to health considerations or travel impediments. Dues for the Alumni membership were established at \$10.00

annually to cover the costs of printing and mailing our monthly FEEDBACK newsletter. Please contact co-chair Mark Hinkel (WA3QVU) for more information.

#### ATTENTION MEMBERS

If you want to have your picture taken to be placed on the 'Members Photos' section of the www.k3dn.org website, please email Mark Hinkel at mrhinkel@verizon.net or myself Michelle at mal61@comcast.net with your interest. If we get enough people who are interested, I will pass the info on and then we will have camera ready at the following club meeting. Remember to bring your best face!"

The Membership Committee has badges and Club cards for you to pick up. If you do not have a Warminster Amateur Radio Club badge or card with your picture on it, please stop by and visit your Membership Chairs, Mark Hinkel - WA3QVU or Michelle London - KB3MTW at the WARC monthly meetings. Otherwise, please contact Membership at: WARCmembership@K3DN.org. Thank

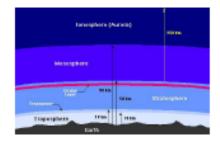
WARCmembership@K3DN.org. Thank you.

## Working HF by KD3TB - The Ionosphere

In explaining our current heat wave on the east coast, I recently heard a local weatherman say that this unusually hot and dry summer we are experiencing occurs every eleven years. Wow, where have I heard that number before? And, I thought the current heat wave was the result of El Nino (3 to 5 year cycle) and global warming. We all know that the sun follows an eleven year cycle of solar activity. While the solar activity is supposed to be on the rise, our sun seems to be getting off a slow and sputtering start. We've seen solar flux number rise into the 90's and then quickly fall again. We seem to be getting a small number of sunspots with each rotation of the sun. So, how does this have an effect upon our ability to communicate with stations on the amateur radio bands?

Page 4 FEEDBACK

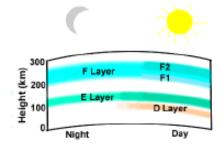
If you read either QST or CQ magazine, there have been a number of recent articles written about our current solar activity and the effect upon propagation. The ARRL publishes a weekly email/newsletter on current solar activity and propagation that you can subscribe to. So, I will make my discussion brief.



From our Technician and General Class course, we know that long distance propagation of HF radio signals, what we call DX, is primarily affected by the ionosphere. The ionosphere derives its name from the term ion or free electron. The free electrons are created by the sun's ultraviolet radiation striking molecules in the upper atmosphere. The higher the radiation, the higher the number of free electrons. At this height the atmosphere is so thin that free electrons can exist for short periods of time before they are captured by a nearby positive ion. Hence this portion of the upper atmosphere is ionized and the number of free electrons is enough to effect radio propagation.

The ionosphere is not another atmospheric layer, considered by some to be an extension of the thermosphere. The ionosphere represents less than 0.1% of the total mass of the Earth's atmosphere. Even though it is such a small part, it is extremely important for radio propagation. If you remember from your early science education (hopefully you did pay attention), the layers of the earth's atmosphere consists of a troposphere (weather), stratosphere (ozone layer and some high flying jets), mesosphere (we hope most meteors and space junk burn up here), thermosphere and finally the thinnest part, the exosphere.

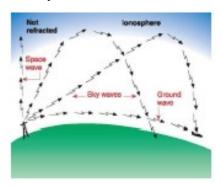
The ionosphere consists of a number of layers that affect the propagation of radio waves. During the daytime, we find a D, E, and F1 and F2 layers. At night, the D layer disappears (almost) and the F1 and F2 layers combine into



one F layer.

The D layer is closest to the earth and HF radio waves do not reflect. This layer has a high tendency to absorb energy resulting in very poor propagation on the bands below 20 meters during daylight hours. At night, this level of absorption disappears. An example of the D layer in action is the disappearance of distant AM broadcast stations in the daytime.

The E layer is the middle layer and only reflects radio waves having frequencies lower than about 10 MHz and may contribute a bit to absorption on frequencies above.



Finally we come to the F layer(s). It is the highest layer of the ionosphere. During the daytime, we find both an F1 and F2 layer which recombine to one layer at night. The F layer has a significant effect upon our ability to work stations around the world. It reflects radio waves in the HF spectrum allowing those in the UHF and VHF to pass through. This is called sky-wave

propagation. Some scientists believe that the radio waves can bounce up to 5 times between the earth (ground) and F-layer before disappearing. Your ability to hear the weaker signals will depend upon your radio's sensitivity and antenna dynamics. Karl Rawer (born April 19, 1913), a German scientist in World War II, developed the first analytical models to determine suitable frequency ranges for shortwave communications.

There is a phenomenon that occurs during twilight hours. At twilight, the D layer disappears leaving a strong E and F layer. This results in an increase in HF propagation around the world. This is called the Gray-line. You will be amazed at the number of Dx stations you can work around this time.

We also have to take into account ground wave propagation. This is usually most notable on the lower bands (below 80 meters) and is affected by the curvature of the early. If you imagine a pebble dropped into a lake, it gives off concentric waves, which eventually dissipates as the wave moves farther from the source. This is ground wave propagation.

As you learned in both your General and Tech classes, with sky-wave and ground-waves, the radiation pattern (waves) will be dependent upon your antenna design. I'll leave this for a future topic of discussion.

So, what does this mean to us on the East Coast given our current solar conditions? Remember, during the summer we are farther away from the sun, but longer daylight hours. Hence there is a slight difference in propagation between summer and winter. I take it most of us have some limited HF antennas. My station at my main house consists of a small beam around 35 feet (for 10, 15 and 20 meters), a vertical and a wire antenna (for 40 and 80 meters). I have a dipole at my vacation home cut for 80 meters up around 40 feet. Over the past few weeks with the solar flux ranging from the mid 70's to high 80's, I have found good Dx'ing on the 20 meters working stations in Europe, South

FEEDBACK Page 5

America and Asiatic Russia during daylight hours. With the extended daylight hours in the summer, I have heard numerous European stations late into the evening. At night with my station set up, 40 meters has been best for Dx'ing into Europe with 80 meters being good for local US contacts.

Look for some Asia activity, primarily Japan, Australia and New Zealand on 40 meters during the early morning hours. You may also hear a station from India if you're lucky. During the daylight hours into the early evening after sundown, I would look for Europe and Africa stations on 20 meters. You'll find some activity on 15 and 10 meters, primarily in a contest. These bands have not been very active. During twilight and into the night, 40 meters should open up into Europe with

some, but rare Dx'ing on 80 meters. I would also look for a Japan station early in the evening on 20 and 40 meters.

I have kept primarily to CW and PSK31 with some activity on SSB. I like these modes as it does not take a lot of power, or big antenna farm, to get a good signal out. If you are like me, CW handicapped, there are a number of software programs available to copy and translate CW using a computer sound card.

The sources of information for this article have included references found on Wikipedia (http://en.wikipedia.org/wiki/Ionosphere), ARRL publications (www.arrl.org) and other internet sources including (http://windows2universe.org/, http://science.nasa.gov, http://www.americanflyers.net and http://

#### 2010 Contest Calendar

August 7 - 8 ARRL UHF Contest

21 - 22 ARRL 10 GHz and Up Contest

**Maryland-DC QSO Party** 1600Z, Aug 14 to 0400Z, Aug 15 and 1600Z-2400Z, Aug 15

**New Jersey QSO Party** 2000Z, Aug 21 to 0700Z, Aug 22 and 1300Z, Aug 22 to 0200Z, Aug 23

Hawaii QSO Party 0700Z, Aug 28 to 2200Z, Aug 29

Kansas QSO Party 1400Z, Aug 28 to 0200Z, Aug 29 and

1400Z-2000Z, Aug 29

Ohio QSO Party 1600Z, Aug 28 to 0400Z, Aug 29

#### > ATLANTIC DIV. HAMFESTS - 2010

8 August Jersey Shore ARS Riverwood Park Riverwood Road

Toms River, NJ 08753 http://jsars.org

**14 August** Reading Radio Club Heritage Park Off Route 422 & 724 Sinking Spring, PA POW 1E0 http://readingradioclub.org

15 August Carroll County Tailgate Fest

Carroll County Agricultural Center 700 Agriculture Center Drive Westminster, MD 21157 http://www.qis.net/~k3pzn

- 29 August Lancaster Amateur Radio Club Bowen Road Grove at Como Lake Park Bowen Road Lancaster, NY 14086 http://gbhamfest.hamgate.net
- 11 September Pocono Area Hamfest Stroudsburg Junior High School Chipperfield Drive Stroudsburg, PA

http://www.gsl.net/n3is/hamfest/index.html

**19 September** Gloucester County ARC's 32nd Annual Hamfest Gloucester County 4-H Fairgrounds 240 Bridgeton Pike (Route 77)

Mullica Hill, NJ 08062 http://www.w2mmd.org

**25 September** Mid-Atlantic States VHF Conference Quality Inn Conference Center 969 Bethlehem Pike Montgomeryville, PA 19454 http://www.packratvhf.com

#### V.E. TEST LOCATIONS

Confirm all information, in advance, with the contact person. Licensed applicants must bring the original, and one photocopy of their license. All applicants, including children, must bring two forms of positive ID. Also bring the original, and a copy, of any Certificate of Successful Completion needed to prove current status. The ARRL VEC'S 2010 test fee is \$15.00.

Warminster Amateur Radio Club,

Monthly, Last Wed. 7:00 pm at the Warminster Recreational and Educational Center on Little Lane.

George Brechmann (215) 443-5656. **Atco, NJ**, The fourth (4th) Tuesday of each month, at 7 p.m. Winslow Township Senior Center, 33 Cooper Folly Road, 08004-2603.

Mark (K2AX) jtra@comcast.net **Levittown, PA**, Monthly, 1st Saturday - George LeNoir, WR3B, 215-943-4886.

**Telford, PA**, Monthly, RF Hill ARC. 3rd Monday at the Indian Valley Library. Charles Schmell, KB3CEZ, 215-257-6368 days 215-538-7458 evenings.

Philadelphia, PA, Testing is done on the 4th, non holiday Thursday of the month at the, Community Ambulance Association of Ambler, 1414 E Butler Pike, Ambler PA 19002 at 7:00 PM We also are testing on Saturdays at least once per quarter at 9:00 AM. For further information contact James McCloskey at jmccloskey@msn.com and by phone 215 -275-2979.

Lansdale, PA Testing on the first non-holiday Tuesday of the month starting at 7:00 PM. The Lansdale Library Community Room Vine St. and Susquehanna Ave. Lansdale, Pa.Registration is required 48 hrs. or more before the scheduled exam date. If there are no registrations the scheduled exam date will be canceled. NO WALK-INS. You can register by contacting:

Olaf N. Markert ----- Phone (610) 517-5074, E-mail w3pa@arrl.net

Page 6 **FEEDBACK** 

#### SKYWARN INFORMATION

MOUNT HOLLY NWSFO SKYWARN Weekly Information Net: EVERY **THURSDAY AT 21:00 HOURS** 

SKYWARN Net Repeater Listing/ Streaming Audio of scheduled SKYWARN **Net:** http://www.skywarnnet.net

\*You do NOT have to be a certified SKYWARN Weather Spotter to check into the Net\*

#### **Bucks County SKYWARN Weather Spotter PRIMARY FREQUENCY:** 147.300MHZ (+ 131.8)

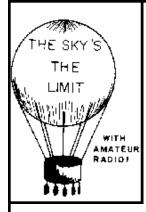
Fairless Hills. PA (many remote access locations throughout Bucks County)

#### Mount Holly NWSFO SKYWARN Homepage:

http://www.erh.noaa.gov/phi/skywarn/index.html

#### SKYWARN Basic Weather Spotter Educational Programs URL:

http://www.erh.noaa.gov/phi/skywarn/training.html#sched



#### The Warminster Amateur Radio Club Announces Free Ham Radio Instructional Classes

If you're interested in Ham Radio, or think you might be, this is your opportunity. Perhaps you'd like to learn about digital communications, Morse code, VHF, UHF, satellite, or perhaps you'd rather sit down and chat with someone in South Africa, Russia, Great Britain or in the space shuttle.

The Warminster Amateur Radio Club will be offering free ham radio Licensing classes for the Tech licenses starting on Monday, September 13th, 2010, at the Benjamin Wilson Community Center. The classes will start at 7:30 pm and last until 9:00 pm and run for 8 weeks.

For further information contact: George Brechmann at 215-443-5656

#### **Bucks County Amateur Radio Emergency Service (BCARES)**

www.bucksares.org

Bucks County ARES will be on the air Wednesdays, at 9:00 PM. We will be using Warminster Amateur Radio Club's repeater on 147.090, pl 131.8. This net is linked as shown in the Net Schedule box for the Wednesday night net. It may also be linked to 147.300. Winlink Gateway Stations:

Upper Bucks NJ3A-10 145.610 Riegelsville Lower Bucks NY3J-10 145.530 Bensalem Montco W3CF-10 145.950 Hatfield Chester County W3EOC-10 145.690

Net Schedules Net Schedules					
Sunday	2100	10 Meter Net	28.445 MHz		
Wednesday	2030	2 Meter Net	147.09 Rptr.		
Wednesday	2030	Linked w/ 2 Meter Net	443.95		
Rptr.Wednesday	2030	Linked w/ 2 Meter Net	53.230 Rptr.		
Sunday	2030	Informal Net	223.5 Simplex		
Thursday	1900	Mont. Cnty RACES Net	146.835 Rptr.		

#### **CLUB EQUIPMENT**

WARC has purchased four Vertex Standard 2-meter HT's that are available for use by members of the club. The HT's are available on a month-by-month basis and have been purchased primarily to help new hams get on the air. However, they may also be used by any club member who is in need of a temporary 2-meter radio. They are also available for use by participants in WARC's public service activities. DE. Irwin Darack KD3TB -343-8170

#### Area Repeaters

#### VHF

145.310 R.F. Hill

145.350 Doylestown R.C.

145.250 Penn Wireless

145.330 Hilltown

146.670 DVRA

146.685 Holmesburg

146.925 Willingboro

147.000 Ham Buergers

147.030 Phil-Mont

147.090 Warminster

147.270 Frankford 147.300 BEARS

147.390 CBRA

#### 220

224.580 PackRats

223.76 K3NAL

#### UHF

442.650 DVRA

443.250 TAG

443.050 Metro-Comm

443.950 Warminster

444.200 BEARS

449.325 KA3WXV

447.475 WR3B

447.625 WE3E

448.225 Penn Wireless

#### **D-STAR**

447.625 K3PDR DStar DV

#### 6 Mtr

53.030 WA3BXW

53.230 N3DOZ

53.320 K3MFI

Page 7 **FEEDBACK** 

#### Are you submitting an article for the Feedback?

Contributions of articles to be published are always accepted for consideration. Please follow these guidelines:

- E-Mail to:
  - wa4ywm@comcast.net Or via snail mail to:
  - FEEDBACK EDITOR Warminster Amateur Radio Club Box 113

Warminster, Pa 18974

- Use both upper and lower case letters.
- Use your program's spell check.
- If you don't have a computer, then typewritten sheets are o.k, but please use both upper and lower case.
- Put your name and call at the beginning or end of the article, and show credits if you are using material from another source.
- Deadline for articles is the Saturday before the Board meeting.

#### The annual dues rate structure is as follows:

**Full Member:** \$ 20.00 **2nd Family Member:** \$ 10.00 **Student:** \$ 10.00 Alumni: \$ 10.00 \$ 5.00 **Associate:** 

- Are your dues current?
- Check the date on your Feedback mailing label.

#### 2010 Officers

#### **Executive Officers**

President	Richard Luce	AG3L	215-441-8264
Vice-President	Irwin Darack	KD3TB	215-343-8170
Secretary	Frank Clayton	WD0ESL	215-855-1029
Treasurer	James Hersch	K3JSR	215-674-1607
Director (E)	Michelle London	KB3MTW	215-672-7578
Director (E)	Mark Kempisty	N3GNW	215-953-1493
Director (A)	Al Konschak	WI3Z	215-491-9941
Director (A)	Brian Taylor	N3EXA	215-257-6303
Past President	Larry Abbott	WA3ELQ	215-443-7521

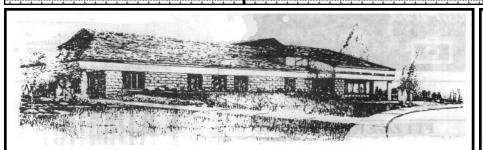
Committee Chairpersons					
Archives	Burt Ludin	N3YVH	267-781-0603		
ARES Liason	Denise Burstein	KB3ANO	215-355-1150		
Arrl Liason	Richard Luce	AG3L	215-441-8264		
Awards Manager	Vince Pironti	KD3TC	215-674-0446		
Classes	George Altemus	KA3WXV	215-855-3856		
Digital and APRS	Ron Wenig	NY3J	215-638-9257		
DXpedition	Doc Whitticar	W3GAD	215-968-6397		
Feedback Editor	Jim Elmore	WA4YWM 215-538-1889			
Field Day 09	Mark Kempisty	N3GNW	215-953-1493		
Fundraising	Adam Huffnagle	KB3JCP	215-442-9526		
Hamfest 10	Mark Hinkel	WA3QVU	215-659-4449		
Hamwear	Burt Ludin	N3YVH	267-781-0603		
Holiday Dinner	George Brechmann	N3HBT	215-443-5656		
Interference	Mark Kempisty	N3GNW	215-953-1493		
Membership	Michelle London	KB3MTW	215-672-7578		
Membership	Mark Hinkel	WA3QVU	215-659-4449		
Net Manager	George Brechmann	N3HBT	215-443-5656		
PA QSO Party	Mark Kempisty	N3GNW	215-953-1493		
Publicity	Dan Myers	KB3IBQ	215-957-2343		
RACES Liason	Chris McCormack	N3JHR	215-969-2626		
Refreshments	Doc Morein	KA3RAU	215-542-0593		
Refreshments	Randy Gehman	N3LJE	215-822-9473		
Repeater Cooridinator	Brian Taylor	N3EXA	215-257-6303		
Satellite	Joe Bagnick	N3EMA	215-997-2539		
Skywarn Liason	Mike Patton	W3MJP	215-491-9665		
Station Trustee	George Brechmann	N3HBT	215-443-5656		
Sunshine Club	Vince Pironti	KD3TC	215-674-0446		
Township Liason	George Brechmann	N3HBT	215-443-5656		
VE License Testing	Larry Abbott	WA3ELQ	215-443-7521		
VHF/UHF/MW	Al Sheppard	N3ITT	610-847-5490		
Website Coordinator	Al Konschak	WI3Z	215-491-9941		
Youth Programs	Richard Luce	AG3L	215-441-8264		
Youth Programs	Steve Larson	WW3Y	215-822-1511		

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### Club Station

## Meetings

#### Talk To Us



The Club Station - K3DN - is located at the Benjamin Wilson Senior Center, Delmont Avenue, Warminster, PA. The station is open for club members and the interested general public on non-holiday Tuesday evenings from 7 to 9 pm . The station is fully operational on HF (80 meters through 10 meters ) both phone and CW. There is an assortment of amateur radio shareware which may be copied under the shareware licensing agreement.

For additional information on the Club Station please call the Station Manager N3HBT - George at 215-443-5656.

> WARC Meetings are held the first Thursday of each month at 7:30 pm at the Benjamin Wilson Senior Center, Delmont Avenue, Warminster, PA. Talk in is available on the 147.09 & 443.950 repeaters.

For general club correspondence: k3dn@k3dn.org

For Feedback articles: wa4ywm@comcast.net

Visit our Home Page at: http://www.k3dn.org

#### Federal Communications Commission

1270 Fairfield Road Gettysburg, PA 17325 *License Information* 800-322-1117 - M-F 0800-1630 *Fax-On-Demand* 202-418-0177

#### **FEEDBACK**

Warminster Amateur Radio Club Box 113 Warminster, Pa 18974

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