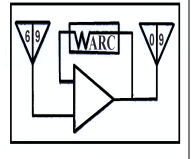




# FEEDBACK



Warminster Amateur Radio Club

Web Site <http://www.k3dn.org>

January 2006

## Next Meeting January 5th - Winlink 2000

### A NOTE FROM RON ON THE JANUARY MEETING

Hi Everyone,

Just thought I would get an early start and announce the presentation for the January meeting. Lor Kutichins, the radio officer for the Chester County ARES/RACES group will be presenting a talk on Winlink 2000. He is on the development team for Winlink 2000 and has given this presentation to other groups. It should be interesting and very informative. If you do a Google search on Winlink 2000 you can read more information about it. The Bucks County ARES group is starting to get into digital communications and we have started a Winlink 2000 system.

Here is a reply I received from Lor. He is a very interesting person and is involved in quite a lot of exciting ham radio related activities. "Winlink in the jungle" was a good article in QST.

Hope everyone has a good holiday and looking forward to seeing everyone at the January meeting. Be sure to tell your friends about it and invite other hams from other clubs.

73, Ron ny3j@comcast.net

"Hi Ron,

Your note finds me in Miami Beach where I am attending a business conference. When I return home I will do my best to send along some training items and a few ideas I have stored away. I just can't do it right now.

I'm in preparation mode for my annual trip to Honduras where I support the International Health Service with

### 2006 Contest Calendar

- Vermont QSO Party 0000Z, Feb 4 to 2400Z, Feb 5
- Minnesota QSO Party 1400Z-2400Z, Feb 4
- Delaware QSO Party 1700Z, Feb 4 to 0500Z, Feb 5 and 1300Z, Feb 5 to 0100Z, Feb 6
- New Hampshire QSO Party 0001Z, Feb 11 to 0001Z, Feb 13
- Louisiana QSO Party 1500Z, Feb 11 to 0300Z, Feb 12
- Mississippi QSO Party 1500Z, Feb 25 to 0300Z, Feb 26
- North Carolina QSO Party 1700Z, Feb 26 to 0300Z, Feb 27

- |                 |  |
|-----------------|--|
| <b>January</b>  | 1 Straight Key Night<br>7 - 8 ARRL RTTY Round-Up<br>21 - 23 ARRL January VHF Sweepstakes |
| <b>February</b> | 18 - 19 ARRL International DX Contest (CW) Rules   |
| <b>March</b>    | 4 - 5 ARRL International DX Contest (Phone)  |

Winlink comms. See the article "Winlink in the Jungle" from Nov 2004 QST (I think). We have a "tune-up" on-air exercise in December-January before we depart in February. I have led it in past years, but this year I have fobbed it off on Jerry Reimer KK5CA to lead. You may be interested in the messages for use with your group, as they contain Airmail and Winlink system tutorial content as well as "homework" and some challenges for operators. Nothing teaches like asking ops to jump through a few hoops, and they find it a fun activity. I have some older messages archived that I can send along, too."

### 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 \$8.00 annually to cover the costs of printing and mailing our monthly FEEDBACK newsletter. Contact Alumni Coordinator Randy Gehman (N3LJE) or Membership

*(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.*



## PROGRAMS

Thursday, January 5, 2006: E-mail @ Amateur Radio.

Bucks County ARES and WARC will host a joint presentation by Lor Kutchins from Chester County of Winlink 2000 and e-mail communication using amateur radio. Lor has done some great stuff in Chester County and has much to share with our groups.

Thursday, February 2, 2006: GOING ONCE... GOING TWICE!

Yes, it's time for the great and wonderful Warminster Amateur Radio Club Auction! Bring in your old, unwanted gear, electronics, technical doo-dads and donate them to the club. We'll auction them off to dozens of interested hams in this one night extravaganza! Bring your ham friends! Bring cash! Because one person's old doo-dad is another's great buy of the nite! See you there!

Thursday, March 2, 2006: HDTV is here

You have heard about it. You've see the big screens in the stores. But what is HDTV? Anthony Burokas our own KB3 Digital Video Specialist, explains what HD is, how you can see it, and why 2006 is supposed to be the end of Broadcast TV. No 3-D glasses needed, but be sure to bring your questions!

Thursday, April 6, 2006: Sattelite Construction- PART -2!

Our own space thespian Steve Larson amazed members with an incredible wealth of information about spacecraft construction- especially GPS satellites and their maintenance. Now Steve continues with Part -2 of his talk, explaining the GPS updates and other cool space stuff. We had to cut it off and push people out the door last time because there were just so many questions! Don't miss this one!

Thursday, May 4, 2006: Pizza & Cool Gadget Nite!

You must bring in one cool gadget from your shack to get in and get your free pizza. It doesn't matter if it's a little cable adaptor that has made your life simpler, or a picture of your awesome 90' crank-up tower. It's show and tell nite and everyone has to bring in one cool gadget to talk about. This way, we all share something new, and all learn something new!

*(Continued from page 1)*

co-chair Harris Stein (KG2HO) or Membership co-chair Mark Hinkel (WA3QVU) for more information.

**FOR SALE**

List no. 1(WA3QVU's)

Standard model SR-270u; AM/ FM Stereo Receiver/ Amp. Older style (not a rack mount) stereo radio in mid-size wood cabinet. RCA jacks on the back for Phono, Tape, and Aux. inputs. Works well, audio sounds very good. Sold w/o speakers. \$5.00

AC Voltage Regulator -- Sorensen model 1000s. Input 95 to 130v 13.5a -- Output 115v 1KVa. This is an old 19in rack mount P/S that has lots of iron. Produces good sine wave power from poor "brown out" conditions. \$5.00

Porter Cable Cutout Tool -- Model 7499 (similar to Rotozip) 3.4a motor at 28,000 RPM. Like new w/ blow molded case. Includes dry wall bits and several carbide bits. With the bits it cost over \$100 -- I just don't use it enough. \$60.00

Connectors, Jacks and Adapters  
 4- 300 ohm test clips all 50 cents  
 F connector (f) (chassis mount) 50 cents  
 PL-259 to F connector (f) \$2  
 3- RCA plug to F connector (f) \$1.50ea  
 RCA jack to F connector (m) \$1.50ea  
 BNC (m) to F connector (f) \$1.50  
 2- PL-259 (Amphenol - crimp) to RG-58 \$1.00ea  
 2- RCA plug to SO-239 \$1.00ea  
 RCA jack to 1/8in plug (w/ 40db attenuation) \$1.00  
 1/8in jack to 1/8in plug (w/ 40db attenuation) \$1.00  
 2- RCA jack to 1/8in plug (stereo) \$1.00ea  
 2- RCA jack to RCA jack (f to f) all \$1.00  
 12- 1/4in Phono Jacks (chassis mount - mono) all \$1  
 RCA jack to 1/4in plug (mono) \$1.00  
 1/4in jack to 1/8in plug (mono) \$1.00  
 10- UG-175 adapters for the PL-259 (RG-58) 50 cents ea  
 4- PL-259 (silver plated w/ Teflon) \$1.25ea  
 Standard size mic connector (3 pin female) \$1.00  
 3- Standard size mic connector (5 pin female) \$1.00ea

2- Standard size mic connector (5 pin male) \$1.00  
 Amphenol connector (4 pin female, larger than std) \$1.00  
 Please contact Mark Hinkel (WA3QVU) 215-659-4449  
 E-mail: <wa3qvu@arrl.net>

List no. 2 for John Vandegrift, K3O0B

National NC-98; General coverage receiver -- AM Band to 40 Mc, with manual. In working condition, but low volume.  
 Clegg 66'er; 6m AM/ CW transceiver with AC cord but no mic or manual. This radio was working when taken off the air many years ago.

Sencore Model SM-112 VTVM-VOM; Portable unit, unusual design - Selector switch has several settings for VTVM on left, and similar settings for VOM on right. Working, with leads.

Crystals; For HF and VHF frequencies.

CB antenna switch, Key, etc. Free!  
 I'm selling these items for a friend in the club -- No reasonable offer refused. I'll have most of this stuff at

*(Continued on page 3)*

(Continued from page 2)

the next meeting.

Please contact Mark Hinkel  
(WA3QVU) 215-659-4449  
E-mail: <wa3qvu@arrl.net>

## SOLAR UPDATE

Heliophile Tad "Mr Nutcracker Suite" Cook, K7RA, Seattle, Washington, reports: Average daily sunspot numbers dropped about five points, and average solar flux was down about three points compared to the previous week. Geomagnetic indexes also were down.

Sunspot 838 currently looks to be the most interesting as it is expanding rapidly and not quite in the center of the visible solar disk--the area where it would have the most effect on Earth. The predicted solar flux for the next few days is around 90--slightly higher than it has been recently, but only by a few points. Sunspot 838 is growing rapidly, but it probably will not emit any solar flares. Planetary A index for December 23-26 is predicted at 7, 7, 10 and 7.

Sunspot numbers for December 15 through 21 were 47, 47, 45, 45, 63, 53 and 45, with a mean of 49.3. The 10.7 cm flux was 87, 85.8, 85.2, 85.6, 89.5, 87.8, and 86.5, with a mean of 86.8. Estimated planetary A indices were 2, 5, 5, 3, 8, 16 and 8, with a mean of 6.7. Estimated mid-latitude A indices were 2, 3, 2, 2, 6, 11 and 5, with a mean of 4.4.

*Courtesy The ARRL Newsletter*

## Leap second to be introduced as new year arrives

The International Earth Rotation and Reference Systems Service (IERS) has announced the introduction of a "time step" at the end of December to add a "leap second" as 2006 arrives. Leap seconds are needed to keep clocks in step with Earth's rotation, which varies by several thousandths of a second per day. Slowing down the clocks every year or two keeps them in sync. As 2005 transitions to 2006, Coordinated Universal Time (UTC) will be retarded

by 1.0 second. This essentially means that the last minute in 2005 will be 61 seconds long: December 31, 2005, 23:59:59; December 31, 2005, 23:59:60; January 1, 2006, 00:00:00. This adjustment will affect UTC and all time scales based on UTC. Loran-C and GPS will not be adjusted physically, however. Times of Coincidence for LORAN-C are available on the Time Service Web Page. For GPS, the leap second correction, contained within the UTC data of the navigation message transmitted by satellites, will change. After the leap second GPS will be ahead of UTC by 14 seconds.

*Courtesy The ARRL Newsletter*

## Pennsylvania ARRL member honored

Carl Stevenson, WK3C, of Emmaus, Pennsylvania, has been named by Scientific American magazine a policy leader within the 2005 "Scientific American 50." The magazine's annual list, which appears in each December's issue, recognizes outstanding acts of leadership in science and technology during the past year. An ARRL Life Member, Stevenson is president and CTO of WK3C Wireless LLC, which provides consulting services in the areas of wireless standards, regulatory affairs and design. His designation as a policy leader stemmed from his work in developing improved wireless networking standards. Stevenson also was named a recipient of the 2005 IEEE Standards Association (IEEE-SA) International Award, which he received in a December 4 presentation. The honor goes annually to an IEEE-SA member for extraordinary contributions to the advancement of the association's goals. Stevenson was recently elected to the IEEE Standards Association's Board of Governors

for a two-year term that begins January 1. A fellow of the Radio Club of America and a senior IEEE member and chair of the IEEE 802.22 Working Group on Wireless Regional Area Networks, Stevenson has been involved in RF communications systems design and development for more than 35 years.

*Courtesy The ARRL Newsletter*

## ARRL EXPERIMENTING WITH ICOM D-STAR DIGITAL SYSTEM

Thanks to the generosity of Icom, MFJ and NCG (Comet), the ARRL has embarked on a project to learn firsthand what D-Star <<http://www.arrl.org/FandES/field/regulations/techchar/>> digital technology has to offer and to assess its capabilities in a real-world Amateur Radio environment. Icom, so far the only ham radio manufacturer offering D-Star equipment, has donated a D-Star voice repeater, data repeater and controller to W1AW. Eight model ID-1 D-Star 10 W mobile transceivers are on loan from the manufacturer.

"We appreciate Icom's cooperation and support as we explore D-Star's capabilities and learn more about digital radio systems," ARRL CEO David Sumner, K1ZZ, said in expressing the League's gratitude.

MFJ donated an MFJ-1532N Pulsar, which is serving as the transmitting antenna, while NCG contributed a pair of Comet GP21 antennas to receive digital data and voice for the 1.2 GHz (23 cm) multipurpose D-Star system. The antennas have been installed on two of the W1AW antenna support structures.

Although still in the early phase, the project plans to exercise the technology's digital voice and data capabilities as well as its capability to become part of a wider D-Star digital repeater network via an Internet gateway.

*(Continued on page 4)*

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Icom Amateur Products Division Manager Ray Novak, N9JA, says the D-Star standard, first published four years ago, resulted from government-funded research in Japan administered by the Japan Amateur Radio League (JARL) to investigate Amateur Radio digital technologies. Novak emphasizes that D-Star is an open protocol that's available for implementation by anyone, and Icom is working with other manufacturers to get more D-Star compatible gear on the market.

"Amateur Radio is again out there in the forefront of technology," Novak says. Although he concedes there's a steep learning curve ahead, he predicts Amateur Radio users will invent new ways to put D-Star technology to work as they get better acquainted with its possibilities.

At this stage, the D-Star 23-cm repeater is up and running in digital voice mode, and W1AW Station Manager Joe Carcia, NJ1Q, and ARRL Web and Software Development Manager Jon Bloom, KE3Z, enjoyed the first contact through the repeater on November 30. In the meantime, Bloom has been working to interface the D-Star system with a Linux server, which will serve as an Internet gateway, to check out that aspect of the system.

Novak says the digital voice stream can simultaneously handle voice at 3600 bps with error correction and data at up to 1200 bps. Since a D-Star voice signal occupies only 6.25 kHz, Novak says, the potential is there to make more efficient use of available spectrum on 2 meters by squeezing up to four D-Star repeaters into the same space as two analog channels. New repeater modules are in development for 2 meters and 70 cm.

Working through a D-Star repeater is a bit different than using an analog repeater. Your call sign is the key to a D-Star system, since it's incorporated into every transmission you make. "Because of D-Star's call sign-routed system," Novak explained, "registered

users are able to cross-communicate with stations registered on another network's D-Star repeater, wherever it may be."

Novak says the 1.2 GHz D-Star system's high-speed (128 kbps) data capability is another exciting feature. With the Ethernet jack on the Icom ID-1 transceiver, you now have the functionality of an ISDN (integrated services digital network) line available in your vehicle," Novak said.

"We'll have to find new ways of using this technology," he continued. "That will be where ham radio changes. This opens up an unbelievable array of features for repeater systems -- including graphics, schedules, tables, photos, you name it!"

A D-Star Last Heard Report Web page <<http://www.dstarusers.org/>> lists stations heard, their location and the date and time and, sometimes, type of transmission. The K5TIT Dallas D-Star Web site <<http://www.k5tit.org/>> includes a repeater listing and a discussion forum, and a promise of more to come.

*Courtesy The ARRL Newsletter*

### **ARRL Certification and Continuing Education course registration**

Registration remains open through Sunday, January 8, for these ARRL Certification and Continuing Education (CCE) Program on-line courses:

Amateur Radio Emergency Communications Level 2 (EC-002), Amateur Radio Emergency Communications Level 3 (EC-003), Antenna Modeling (EC-004), VHF/UHF Beyond the Repeater (EC-008), Radio Frequency Propagation (EC-011) and HF Digital Communications (EC-005) Classes begin Friday, January 20.

To learn more, visit the CCE Course Listing page

<<http://www.arrl.org/cce/courses.html>> or contact the CCE Department <[cce@arrl.org](mailto:cce@arrl.org)>.

*Courtesy The ARRL Newsletter*

### **ARRL, IARU CONTRIBUTE TO ITU ULTRA-WIDE BAND STUDIES**

The ARRL and the International Amateur Radio Union (IARU) have contributed to International Telecommunication Union (ITU) Radiocommunication Sector (ITU-R) studies of Ultra-Wide Band (UWB) short-range RF technology and its potential to interfere with licensed radio services. UWB devices operate by employing very narrow or short-duration RF pulses that result in very sizeable, or wideband, transmission bandwidths. In February 2002, when the FCC released its 122-page Report and Order (R&O) in the UWB proceeding, WT Docket 98-153, it expressed its belief the technology "offers significant benefits for government, public safety, businesses and consumers." But the Commission also allowed that UWB's "substantial benefits" could be outweighed if UWB devices interfered with licensed services and "other important radio operations."

"ITU-R Task Group 1/8 struggled to characterize UWB emissions, such as what frequency ranges, pulse characteristics and power levels," said ARRL Chief Technology Officer Paul Rinaldo,

### **WARC JACKETS, SHIRTS AND HATS**

**Are available. Delivery within one month of placing order- the more we order, the lower the prices. See Bob (K3SRO) or call him at 215-822-7474 for order forms and cost information.**

*(Continued from page 4)*

W4RI. Rinaldo and ARRL Technical Relations Specialist Walt Ireland, WB7CSL, served on TG 1/8, took part in many of the Task Group's US studies and preparatory meetings and served as part of the US delegations to ITU-R TG 1/8 international meetings. The League and the IARU also provided the characteristics of Amateur Radio systems.

"The FCC Report and Order on UWB was a starting point for the world body to accept it, reject it or modify it," Rinaldo explained "Whatever was submitted by ARRL had to be consistent--or at least not in disagreement--with the FCC R&O, as well as survive the vetting process for all US contributions to ITU."

Prospective UWB applications include ground-penetrating radars, through-wall imaging, medical imaging and vehicle collision-avoidance systems. The FCC says its analysis indicates that UWB devices can operate on an unlicensed basis without causing harmful interference "provided appropriate technical standards and operational restrictions" are in place.

"Having described the characteristics of UWB devices," said Ireland, "then the problem was to determine how

UWB emissions propagate from the device to a radio system that might be interfered with." The wide frequency range over which UWB operates made that task more difficult, he noted.

Peter Chadwick, G3RZP, represented the IARU throughout the life of TG 1/8 and made substantial on-the-spot contributions to the technical work. "The ARRL Laboratory provided basic characteristics of Amateur Radio systems --in this case related to bands between 3.1 and 10 GHz," Ireland added. Ken Pulfer, VE3PU, also contributed to the task group's work.

In the final analysis, the US did not get the rest of the world to accept the FCC's UWB R&O without question. "The Europeans in particular came up with their own ideas on UWB systems and potential interference to systems they want to protect," said Rinaldo. "As a radio service, amateurs didn't get everything they desired either, but got the characteristics of our radio systems on record."

He says four Draft New Recommendations (DNRs) on UWB characteristics, compatibility, framework and measurement and a report with radio systems gained approval at the Task Group and Study Group levels and soon will circulate to individual administrations for their approval.

"The bottom line? UWB is capable of interfering with radio services," Ireland concluded. "If the UWB device and the radio system--including antenna--are in the same room and so forth, interference is likely." Walls or distance between a UWB device and a radio system make interference less likely, he added.

"In other words, for Amateur Radio stations, UWB interference most likely would be a self-inflicted wound," Rinaldo suggested. "That is, a computer wireless UWB mouse would probably interfere with receivers in the shack operating in the same bands."

*Courtesy The ARRL Newsletter*

**ISS crew sends holiday greetings from space**

"What a wonderful place to spend Christmas!" That was the word this week from Expedition 12 Commander Bill McArthur, KC5ACR, and his crewmate and Flight Engineer Valery Tokarev on the International Space Station. Wearing Santa hats, the astronaut and the cosmonaut extend Christmas and new year's greetings to everyone on Earth in a video clip available from NASA TV during which they take turns at the microphone

<<http://anon.nasa-global.speedera.net/anon.nasa-global/ccvideos/jsc/windows/>

[holiday05\\_iss.aspx](http://anon.nasa-global/ccvideos/jsc/windows/holiday05_iss.aspx)>. In it, McArthur says that this is his favorite time of year, and he regrets not being able to spend it with his family this year.

"As we look down on the earth, especially during this time of year, it really strikes us how fortunate mankind is to live on such a wonderful, beautiful planet," McArthur goes on to say during the greeting, which runs about almost four minutes. "And also we realize we have great responsibilities as stewards of this planet." McArthur and Tokarev will return to Earth in April.

*Courtesy The ARRL Newsletter*

**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>

## ATLANTIC DIV. HAMFESTS - 2006

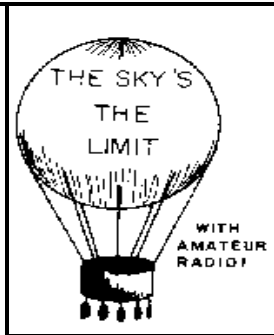
➤ + *indicates ARRL Hamfest*

25-26 Mar 2006 + Greater Baltimore Hamboree and Computerfest  
 Baltimore Amateur Radio Club <http://www.gbhc.org>  
 Timonium, MD Maryland State Fairgrounds York & Timonium Roads  
 23 Apr 2006 + York Spring Hamfest - York Hamfest Foundation  
<http://www.yorkhamfest.org> York, PA York County 4H Grounds  
 6 May 2006 + The Great Hagerstown Hamfest Antietam Radio Association  
<http://www.w3cwc.org> Hagerstown, MD Washington County Agricultural Center  
 7 May 2006 + Warminster ARC <http://www.k3dn.org>  
 Wrightstown (Bucks County), PA Middletown Grange  
 2 Jul 2006 + 27th Annual Hamfest & Computerfest Murgas ARC (K3YTL)  
<http://www.qsl.net/k3ytl> Lake Lehman, PA Luzerne County Fairgrounds  
 Route 118  
 13 Aug 2006 + 7th Annual Carroll County Tailgate Fest  
 Carroll County Amateur Radio Club <http://www.qis.net/%7Ek3pzn/Tailgate.htm>  
 Westminster, MD Carroll County AG Center 700 Agriculture Center Drive

## 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 2003 test fee is \$12.00.

- ◆ **Warminster Amateur Radio Club**, Monthly, Last Wed. 7:00 pm - Tom Michaud, WA3TQJ, 215-343-3494.
- ◆ **Bellmawr, NJ**, Monthly, 3rd Thursday 6:30 PM Bellmawr Comm. Senior Citizens Center Browning Rd. at Lewis St. Diane Nafis N2LCQ, 856-228-8088.
- ◆ **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**, NE Philadelphia, Pa. Monthly; 1st Thursday - 6:00pm. Philmont Mobile Radio Club at Space Research Center (SPARC) Northeast High School Cottman and Glendale Aves. (Enter the SPARC wing from Glendale Av., opposite Teesdale St.)- Dusty Rhoads, ND3Q, 215-482-0386 Or 215-879-0505. No exam in July or August.



*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.

We'll help you learn the theory and practices that make for a most enjoyable hobby. There's no telling just how far you'll go unless you make the first move and give yourself a chance to explore the world.

For further information call: George Altemus at 215-855-3856 or George Brechmann at 215-443-5656

## 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 BURGERS
147.030	Phil-Mont
147.090	Warminster
147.165	Delmont R.C.
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

6 Mtr	
53.030	WA3BXW
53.230	N3DQZ
53.370	K3MFI

### Goddard ARC

#### Shuttle Rebroadcast Frequencies

Frequency	Mode	Band
3,860 kHz	(LSB)	80 meters
7,185 kHz	(LSB)	40 meters
14,295 kHz	(USB)	20 meters
21,395 kHz	(USB)	15 meters
28,650 kHz	(USB)	10 meters
147.45 MHz	(FM Simplex)	2 meters

### Metro-Link repeater network

29.62	Chester, PA
147.135	Buckshootum, NJ
147.315	Chester, PA
223.96	Millville, NJ
223.98	Ocean city, NJ
224.68	Eagleville, PA
224.96	Chester, PA
443.00	Linwood, PA
443.05	Chester, PA

## Net Schedules

Sunday	2100	10 Meter Net	28.440 MHz
Wednesday	2030	2 Meter Net	147.09 Rptr.
Wednesday	2030	Linked w/ 2 Meter Net	443.95 Rptr.
Sunday	2030	Informal Net	223.5 Simplex
Wednesday	2100	BCARES	147.09 Rptr.
Thursday	1900	Mont. Cnty RACES Net	146.835 Rptr.

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

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

- Submit in IBM format on a floppy disk.
- Or via 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 Thursday after the Club meeting.
- Volunteers are needed for folding at the Board Meeting, Ben Wilson Center, last Thursday of the month, 7:30 PM.

*Bucks Bagels*  
1179 York road (RT. 263)  
Warminster, PA  
674-1400

*"Home of the fresh, not frozen dough"*

The annual dues rate structure is as follows:

**Full Member: \$ 20.00**  
**2nd Family Member: \$ 10.00**  
**Student: \$ 10.00**  
**Alumni: \$ 8.00**  
**12th grade or under: \$ 5.00**

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

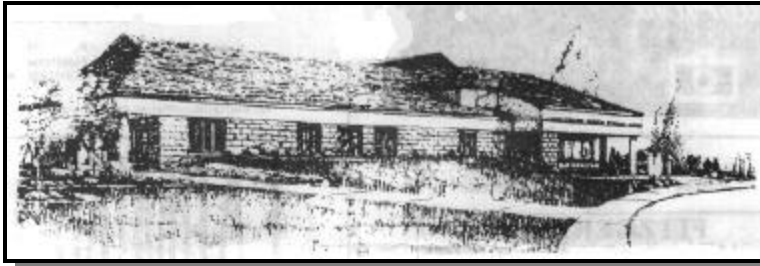
**2006 Officers**

Executive Officers

President	Tony Simek	N3YNH	674-5218
Vice-President	Anthony Burokas	KB3DVS	632-3283
Secretary	Dan Myers	KB3IBQ	957-2343
Treasurer	Denise Burstein	KB3ANO	355-1150
Director (E)	Tom Michaud	WA3TQJ	343-3494
Director (E)	George Brechmann	N3HBT	443-5656
Director (A)	Al Konschak	WI3Z	491-9941
Director (A)	Larry Abbott	WA3ELQ	443-7521
Past President	Mark Kempisty	N3GNW	953-1493

Committee Chairpersons

Feedback Editor	Jim Elmore	WA4YWM	538-1889
Membership co-Chair	Harris Stein	KG2HO	444-0663
Membership co-Chair	Mark Hinkel	WA3QVU	6594449
Field Day '06	Ron Wenig	NY3J	638-9257
Field Day '06 co-chair	Stu Simon	K2QBU	345-9295
Grange Fair '06			
Hamfest '06	Bill Strunk	K3ZMA	822-0749
January '06 VHF Contest	Joe Bagnick	N3EMA	997-2539
PA QSO Party '06	Mark Kempisty	N3GNW	953-1493
Archives	Frank O'Neill	N3UQP	699-9549
Alumni Coordinator	Randy Gehman	N3LJE	822-9473
ARRL Liaison	Kristina Pistilli	KB3ECW	572-5330
ARES Liaison	Denise Burstein	KB3ANO	355-1150
Awards Mgr.	Vince Pironti	KD3TC	674-0446
Classes	George Altemus	KA3WXV	855-3856
DXpedition	Doc Whitticar	W3GAD	968-0641
Special Interest Groups	Ron Wenig	NY3J	638-9257
CW/QRP co-chair	Marty Squicciarini	NR3Z	393-1492
Digital/APRS co-chair	Ron Wenig	NY3J	638-9257
FM/Repeater co-chair	Mark Hinkel	WA3QVU	659-4449
Satellite co-chair	Joe Bagnick	N3EMA	997-2539
VHF/UHF/MW co-chair	Al Sheppard	N3ITT	610-847-5490
Emergency Coordinator	Stu Simon	K2QBU	345-9295
Fundraising	Erik D'Onofrio	N3YNX	675-9165
Hamwear	Bob Wilderman	K3SRO	822-7474
Holiday Dinner co-chair	Berni Lindinger	N3RJD	343-5249
Holiday Dinner co-chair	Doug Mahoney	N3RJE	343-5249
Interference	Tom Michaud	WA3TQJ	343-3494
Net Manager	George Brechmann	N3HBT	443-5656
Notary Public	Whitey Metzger	AA3FT	947-0843
Publicity	Mike Karabin	WJ3O	
RACES Liaison	Bob Phillips	KA3VKU	766-0456
Refreshments	Randy Gehman	N3LJE	822-9473
Refreshments	Doc Morein	KA3RAU	542-0593
Repeater Coordinator	Brian Taylor	N3EXA	257-6303
SKYWARN Liaison	Mike Patton	W3MJP	491-9665
Station Trustee	George Brechmann	N3HBT	443-5656
Sunshine Club	Vince Pironti	KD3TC	674-0446
Township Liaison	George Brechmann	N3HBT	443-5656
VE License Testing	Tom Michaud	WA3TQJ	343-3494
WEB Site Coordinator	Al Konschak	WI3Z	491-9941
Youth Programs Co-Chair	Steve Larson	WW3Y	822-1511

**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.

**APRS on 144.390**

K3DN is also operating APRS on 144.390

**Internet Connection**

For general club correspondence:  
k3dn@k3dn.org

**For Feedback articles:**

wa4ywm@comcast.net

**Visit our Home Page on the WWW:**

<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

**Address Service Requested. If  
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