



## Utility Cuts Short BPL Trial

NEWINGTON, CT, June 28<sup>th</sup>, 2004 — Alliant Energy has called an early end to its broadband over power line (BPL) pilot project in Cedar Rapids, Iowa. The "evaluation system" went live March 30, and plans were for it to remain active until August or September. Alliant shut it down June 25. Ongoing, unresolved HF interference from the system to retired engineer Jim Spencer, W0SR, and other amateurs prompted the ARRL to file a complaint to the FCC on Spencer's behalf demanding it be shut down. Spencer said he was happy with Alliant's decision, and was gracious in expressing appreciation to the utility for working with him on the interference issues.

"And thanks also to the ARRL and the Cedar Rapids BPL Steering Committee for their knowledge and efforts in making a truly professional evaluation," he added.

Alliant Energy's BPL Project Leader Dan Hinz says the ARRL complaint "certainly was a factor" in the utility's decision to pull the plug prematurely but "not the overriding factor." More to the point, he said, was that Alliant also was able to "accomplish the majority of its objectives" ahead of schedule. The primary purpose of the Cedar Rapids evaluation was to gain an understanding of BPL technology and what issues might be involved in a real-world deployment, Hinz explained, adding that regulatory uncertainty and other unspecified technical issues also factored into the choice to end the pilot early.

Hinz said Alliant is "mashing the data" to compile a written evaluation of the Cedar Rapids pilot, but the company has no plans at this point to move forward with BPL. Alliant did not partner with a broadband services provider, and it has no other BPL test systems in operation. The system used Amperion BPL equipment.

According to Spencer, five fixed Amateur Radio stations within proximity of the BPL evaluation system and two mobile stations formally reported BPL interference on HF. "The radio amateurs and Alliant Energy cooperated by sharing interference information," he said. "Alliant Energy turned the BPL evaluation system off twice to allow collection of extensive BPL frequency and signal level data—with and without BPL." He said Alliant and Amperion tried various "notching" schemes to rid amateur frequencies of the BPL interference with only limited success. The system included both overhead and underground BPL links to feed 2.4 GHz wireless "hot spots" for end user access.

Hinz said the area's topography presented some challenges, especially with the system's wireless links. In hindsight, he suggested, Cedar Rapids might have not have been the best place to test BPL. "I think in the end, we actually over-challenged ourselves with this specific pilot location." Despite "substantial progress" in interference mitigation, Hinz said, Alliant decided at this point that "it wasn't worth the extra effort" to resolve the thornier technical issues.

As for the broader implications of Alliant's decision, Hinz says he's always viewed BPL as a "strategic deployment technology," not one a company could roll out just anywhere and expect to be competitive with existing broadband services such as cable and DSL.

*(BPL Alliant Trial on page 8)*

### Top of the Hill



It's hard to believe that 1/2 of 2004 is now past. In retrospect, we've had a pretty good year so far. The Hamfest was successful and a good time was had by all at Field Day.

Even though we had a good time at Field Day we need to figure out why we had trouble making SSB QSO's. Our count was way down compared to past efforts.

In addition to other things, please come to the next meeting prepared to discuss what you would like to do as a Club during the next six months. It's probably just as easy to do things that interest us as not so come and contribute to the discussion.

A couple things keep creeping into my mind. One is—Should we undertake some form of service project and the other is that we still haven't really gotten our "help" team in gear. How about a volunteer to lead this effort?

We also still need someone to be our "PR" person. Once again, how about a volunteer?

Thanks to all for your help so far this year and remember if you haven't paid your dues yet, It's time.

— 73, Bill Hill W3WH, President  
Wireless Association of South Hills, Inc.  
N3SH / WA3SH / NP2SH/B

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### Next Meeting: July 8<sup>th</sup>, 2004

The next monthly meeting of the **WIRELESS ASSOCIATION OF SOUTH HILLS, INC.** will be Thursday, July 8<sup>th</sup>, at the **Peters Township Library**, 616 East McMurray Road, McMurray, starting at 7:00 PM.

Planning for the second half of 2004 will be the topic of the evening. Have an idea? Now's the time to bring it!

Talk-in on the 146.955(-) N3RNX/R and 443.650(+) N3BV/R Repeaters (131.8 PL). All members, guests and interested parties invited!

WASH FM Net  
9:00 PM ET  
Sunday Nights  
on the 146.955  
and 443.650  
Repeaters

**July NCS Stations:**

07/04 No Net  
07/11 Kevin N3HKQ  
07/18 Hank KB3FNM  
07/25 Harold KB3CPI  
08/01 Bill W3WH

Alternates & Backups  
Ron WN3VAW

Want to volunteer to be a Net Control Station? Please contact FM Net Manager Kevin N3HKQ for more information.

**LOOKING AHEAD:**

- North Hills ARC Hamfest **New Date** August 8<sup>th</sup>
- Skyview RS Hamfest August 29<sup>th</sup>
- Butler Co ARA Hamfest & ARRL WPA Convention Sept. 12<sup>th</sup>
- Somerset Co ARC Hamfest Sept. 19<sup>th</sup>
- Pennsylvania QSO Party Oct. 9<sup>th</sup> & 10<sup>th</sup>

# July 2004

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1 WACOM Meeting RA Erie Meeting Uniontown ARC Net	2 <i>Pittsburgh Regatta</i> Elco ARS Meeting	3 <i>Pittsburgh Regatta</i> RA Erie VE Test WPA Hilltoppers VE Test Somerset Co ARC Breakfast Nittany ARC Coffee Call North Hills ARC Elmer Net
<b>Fourth of July</b> Ellwood City ARA Meeting QCWA Pittsburgh Net North Hills ARC Teen Net Somerset Co ARC Net WASH FM Net	5 Breezeshooters Net 2 Rivers ARC Net Triple 'A' ARC Net Beaver Co Public Service Net	6 Butler Co ARA Mtng Skyview RS Meeting WACOM Net North Hills ARC Net SATERN Net GPVHFS Swap m' Shop Net	7 Uniontown ARC Meeting Steel City ARC Social Night Allegheny Co SKYWarn Net Allegheny Co ARES Net Westmoreland Co ARES Net	8 <b>WASH Meeting</b> Horseshoe ARC Meeting Beaver Valley ARA Meeting Uniontown ARC Net	9	10 <i>PVGP BeaverRun</i> <i>IARU HF Championship</i> NHARC/Breezeshooters VE Test Skyview RS VE Test Foothills ARC Breakfast 2 Rivers ARC Breakfast North Hills ARC Breakfast Quad Co ARC Breakfast
11 <i>PVGP BeaverRun</i> <i>IARU HF Championship</i> QCWA Pittsburgh Net North Hills ARC Teen Net Somerset Co ARC Net WASH FM Net	12 <i>Bum of the Month Lunch</i> ARL Lawrence Co Meeting Steel City ARC VE Test Breezeshooters Net 2 Rivers ARC Net Triple 'A' ARC Net Beaver Co Public Service Net	13 Foothills ARC Meeting Coke Center ARC Meeting Ft Venango M&KC Meeting Nittany ARC Meeting Punxsatawney Area ARC Mtng 2 Rivers ARC VE Test WACOM Net North Hills ARC Net	14 North Hills ARC Meeting Butler Co PSG Meeting Laurel Highlands VHFS Mtng Steel City ARC Social Night Allegheny Co ARES Net Westmoreland Co ARES Net	15 <b>WASH VE Test</b> Butler Co ARES Mtng. Triple "A" ARA Meeting Somerset Co ARC Meeting Greene Co ARC Meeting Cumberland Valley ARC Mtng	16 Quad Co ARC Pittsburgh Vintage Grand Prix Amateur Radio Volunteers Meeting 7:00 PM Schenley Park	17 <i>PVGP Schenley Park</i> Mercer Co ARC VE Test Nittany ARC Coffee Call North Hills ARC Elmer Net
18 <i>PVGP Schenley Park</i> Elk Co ARC Meeting WPRC Meeting (Altoona) QCWA Pittsburgh Net North Hills ARC Teen Net Somerset Co ARC Net WASH FM Net	19 Monessen ARC Meeting Breezeshooters Net 2 Rivers ARC Net Triple 'A' ARC Net Beaver Co Public Service Net	20 Steel City ARC Meeting S H B P & M Meeting 2 Rivers ARC Meeting Tri-County CW ARC Meeting Junata Valley ARC Meeting Pymatuning ARC Meeting Junata Valley ARC Meeting WACOM Net	21 Huntington Co ARC Meeting Allegheny Co SKYWarn Net Allegheny Co ARES Net Westmoreland Co ARES Net	22 Uniontown ARC Net	23	24 Indiana Co ARC VE Test North Hills ARC Elmer Net
25 QCWA Pittsburgh Net North Hills ARC Teen Net Somerset Co ARC Net WASH FM Net	26 Breezeshooters Net 2 Rivers ARC Net Triple 'A' ARC Net Beaver Co Public Service Net	27 Mercer Co ARA Meeting WACOM Net North Hills ARC Net SATERN Net GPVHFS Swap m' Shop Net	28 Ft. Armstrong WA Meeting Steel City ARC Social Night Allegheny Co ARES Net Westmoreland Co ARES Net	29 WACOM Board of Directors Meeting Uniontown ARC Net	30	31 <b>WASH Breakfast</b> Nittany ARC Coffee Call North Hills ARC Elmer Net

## WASH 2004 OFFICERS

**EXECUTIVE COMMITTEE:**

President William R. Hill W3WH  
VP / Secretary Frank Bobro KB3FZU  
VP / Treasurer Mark Stabryla N3RDV

**AND WE COULDN'T DO IT WITHOUT:**

N3SH / WA3SH Trustee Steve Lane W3SRL  
NP2SH Trustee Paul Jordan NP2JF  
N3SH / WA3SH QSL Manager Paul Lusardi NØVLR  
NP2SH QSL Manager Ed Oelschlager N3ZNI  
VE Team Liaison Jacqué Gosselin N3ZEL  
Webmaster Bob Sanford AA3FI  
Quartermaster Harold Rosenberger KB3CPI  
WASH FM Net Manager Kevin Smith N3HKQ  
WASHFest 2004 Committee Steve Lane W3SRL, Chairman  
Carol Danko KB3GMN  
Bill Hill W3WH  
Kevin Smith N3HKQ  
Larry Comden K3VX  
Ted Huf W4ZE  
Activities & Operating Events Carol Danko KB3GMN  
Kevin DeRose N3KFD  
Ben Williams KB3ERQ  
Ways & Means  
Media Communications  
Allegheny Co ARES Representative

**CLUB-AFFILIATED REPEATERS & BEACONS:**

Mt. Lebanon N3RNX/R 146.955 MHz (-) PL 131.8  
Mt. Lebanon W3SRL/R 442.550 MHz (+) PL 131.8  
Echo Link #26861 (courtesy W3SRL) 443.650 MHz (+) PL 131.8  
Canonsburg N3BV/R 28.276 MHz  
St. Johns, VI NP2SH/B

N3SH/WA3SH WASHNet, the weekly on-air net of WASH, meets every Sunday Night, 9:00 PM ET, on the 146.955 & 443.650 repeaters. All radio amateurs, WASH members or not, are welcome to join in!

## THE LEGAL STUFF

"The WASHRag™" (formerly "The Mariner™") is the Official Newsletter of the WIRELESS ASSOCIATION OF SOUTH HILLS, INC. (WASH)

Published Monthly with occasional Special Editions as warranted.

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Editor & Publisher: Ron Notarius WN3VAW

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Ron Notarius WN3VAW  
946 Sleepy Hollow Road  
Castle Shannon, PA 15234-2222

e-mail: [wn3vaw@njdxa.org](mailto:wn3vaw@njdxa.org) or [wn3vaw@yahoo.com](mailto:wn3vaw@yahoo.com)

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The WIRELESS ASSOCIATION OF SOUTH HILLS, INC. was founded on August 23<sup>rd</sup>, 1993, as the original SOUTH HILLS AMATEUR RADIO CLUB, and operated under that name through 1998. WASH was also known briefly in late 1998 as the N3SH AMATEUR RADIO CLUB. It is not in any way affiliated with the "South Hills Amateur Radio Club, Inc." and is not responsible for that group, it's members, or it's actions in any way, shape, or form.

As always, special thanks to the owners of both the N3RNX/R Repeater System and the N3BV/R Repeater System for permitting the WIRELESS ASSOCIATION OF SOUTH HILLS, INC. and it's members to use their repeaters for club purposes. Special thanks also to our webmaster, Bob Sanford AA3FI, and to Shawn Djernes NØPEU for providing space on-line for back issues of "The WASHRag™" which can be found at [www.washarc.org](http://www.washarc.org) or [www.djernes.org/washrag](http://www.djernes.org/washrag)

# WASH Amateur Radio Club News Briefs

## Next WASH VE Test July 15<sup>th</sup>!

The Next WASH VE exam sessions will be **Thursday, July 15<sup>th</sup>, 2004, 6:30 PM**, at the **Peters Township Library**, 616 East McMurray Road, McMurray, PA. Talk-in on the 146.955 MHz and 443.650 MHz repeaters. All examiners are ARRL VEC affiliated.

Walk-ins are always welcome, but if you plan on attending the test session, please contact VE Team Liason Jacqué Gosselin N3ZEL:

Telephone (724) 746-9235 or E-Mail: [n3zel@fyi.net](mailto:n3zel@fyi.net)

Please bring the following to your test session:

Picture ID or other suitable identification (2 forms of ID required)

Pen / Pencil / Calculator

Original FCC license plus a copy of license (if upgrading)

Original CSCE plus a copy of CSCE (if upgrading)

Check or Cash in the amount of **\$12.00** (payable to: ARRL VEC)

Future test dates: Thursday, October 21<sup>st</sup>, 2004  
 Thursday, January 13<sup>th</sup>, 2005  
 (2005 tentative) Thursday, April 21<sup>st</sup>, 2005  
 Thursday, July 21<sup>st</sup>, 2005

June 26<sup>th</sup> was not just the morning of Field Day but time for the monthly meeting of the **WASH Breakfast Gang**. The location was moved to the **Beach House** on Route 88, just south of Trax Farms at Mineral Beach, just a stone's throw away from our Field Day site. Many of the FD setup crew came to share a good time and go over last minute plans before heading out to get the antennas up. Unfortunately, we don't have a list of attendees or other topics... Ye Editor had to work all morning!

The next Club Breakfast will head back down to **The Starting Line Café** on Route 19 near Race Track Road, north of Washington, on July 31<sup>st</sup>, returning to the **Your Way Café** in the Caste Village Shops, Grove & Baptist Roads, Whitehall, on August 28<sup>th</sup>. See you there!

**Thanks Again** to the Library Sportsman's Association for letting us use their excellent facility for Field Day again this year. It's really appreciated!

**ARISS Update:** Week after Field Day, spoke with our NASA ARISS : mentor," Howard WA3GOV. The ISS contact is tentatively pencilled in for the week of August 16<sup>th</sup>; it was pushed back two weeks by other NASA priorities. As we get closer to the week, the exact date will be set. One small hold up is that some information on the school is required from Pat ex-KA3WZP, and once she's been contacted and the blanks filled in, everything will be an official "go!"

**Pittsburgh Vintage Grand Prix** is coming up this month, and as always, the event needs Amateurs to operate the radio net that acts as race control's on course eyes & ears. If you're interested and have not already done so, call Corky N3MJP at (724) 626-0873 or (724) 217-5458 and let him know your interest and availability (either Saturday, Sunday, or both). **WASH** will be well represented, as usual — look for KB3HVN, K3VX, WA3JPP & WN3VAW on the golf course at Corner 18, the **Fleming Flag!**

**And speaking of the PVGP:** "For several years Tippi and I have underwritten a day's worth of announcements on WQED-FM. Usually we honor a birthday or anniversary. This year on July 15th it's very different:

Today's programming is made possible, in part, by Tippi and Larry Comden in honor of the AMATEUR RADIO OPERATORS WHO PROVIDE RACE COURSE COMMUNICATIONS FOR THE VINTAGE GRAND PRIX

This announcement will be used 15 times during the day. I hope this makes up for the non-recognition in last year's Vintage Grand Prix Program. BTW, Ted Sohler of WQED-FM is also the official voice of the Grand Prix." — Larry K3VX (And for those who don't know, after many years, the short article in the PVGP Program acknowledging the efforts of the Radio Amateurs was removed)

Would you believe that the **Pennsylvania QSO Party** is only a touch over three months away? Believe it! Now is the time to start making plans — to run your station from home, run mobile, set up a portable station in a remote county, or join one of the club efforts — tentatively, **N3SH** will be operating from Greene County under the direction of K3VX and W3WH, **WA3SH** from Fayette County courtesy KB3IAC and KB3FZU, **WA3COM** will be operated by WACOM from Washington County, and Steel City ARC's **W3KWH** will be making Allegheny County QRV. Interested? Let's talk about it at the meeting!

**WASHNet NCS Schedule:** Kevin N3HKQ has provided this tentative schedule for the Sunday **WASHNet** Net Controls for the rest of the year — remember that it's subject to change!

- |                        |                        |
|------------------------|------------------------|
| 08/01 - Bill W3WH      | 10/24 - Michael KB3HFP |
| 08/08 - Bell Family    | 10/31 - Frank KB3FZU   |
| 08/15 - Michael KB3HFP | 11/07 - Paul NØVLR     |
| 08/22 - Frank KB3FZU   | 11/14 - Carol KB3GMN   |
| 08/29 - Paul NØVLR     | or Rich N3SBF          |
| 09/05 - Hank KB3FNM    | 11/21 - Steve W3SRL    |
| 09/12 - Carol KB3GMN   | 11/28 - Kevin N3HKQ    |
| or Rich N3SBF          | 12/05 - Hank KB3FNM    |
| 09/19 - Steve W3SRL    | 12/12 - Harold KB3CPI  |
| 09/26 - Kevin N3HKQ    | 12/19 - Bill W3WH      |
| 10/03 - Harold KB3CPI  | 12/26 - Bell Family    |
| 10/10 - Bill W3WH      | 01/02 - Michael KB3HFP |
| 10/17 - Bell Family    | 01/09 - Frank KB3FZU   |

## AMSAT-OSCAR ECHO Launched

The AMSAT-OSCAR Echo Amateur Radio satellite and several other payloads launched on schedule June 29 at 0630 UTC from Baikonur Cosmodrome in Kazakhstan. Ground controllers made their first contact with Echo at 1452 UTC and collected some telemetry to analyze before shutting down the 435.150 MHz digital downlink transmitter.

"This achievement is due to many individuals around the world, who have helped in the design, building, integration, testing and launching of this satellite," said AMSAT-NA President Robin Haighton, VE3FRH.

Earth stations should not attempt to transmit on the satellite's uplink until checkout and commissioning are complete and AO-Echo has been made available for general use. The satellite could be available in 10 days or so. AMSAT will release a bulletin when the satellite opens.

A telemetry decoding program, TLMEcho, is available for those who would like to view and report data from Echo. It may be downloaded at [web.infoave.net/~mkmk518/echo.htm](http://web.infoave.net/~mkmk518/echo.htm). Send CSV telemetry files to Mike Kingery, KE4AZN, [ke4aznamsat.org](mailto:ke4aznamsat.org).

AO-Echo's sun-synchronous orbit is some 800 km (nearly 500 miles) above Earth. Among other capabilities, the 10-inch-square microsat — equipped with a transmitter capable of up to 7 W output — will allow voice communication using handheld FM transceivers. Echo will feature V/U, L/S and HF/U operational configurations, with V/S, L/U and HF/S also possible. FM voice and various digital modes, including PSK31 on a 10-meter SSB uplink, also will be available.

Visit the AMSAT AO-Echo Web page [www.amsat.org/amsat-new/echo/](http://www.amsat.org/amsat-new/echo/) for additional details.

— Jim Jarvis N2EA,  
AMSAT Marketing Manager

"AMSAT is really anxious for photos of FD satellite stations. I know several of you took same. Please email them to me ASAP so I can get in the next AMSAT Journal.

BTW, seems that N3SH was the ONLY FD QSO for several stations; we've gotten thanks from a couple of stations! Way cool . . ."

Thanks & 73,

Jim WB4GCS  
[wb4gcs@amsat.org](mailto:wb4gcs@amsat.org)

# Minutes, June 10<sup>th</sup> Meeting

Frank Bobro KB3FZU, VP/ Secretary, **WASH**

Bill, W3WH, **called** the meeting **to order** at 19:00 hours. There were 24 members and guests in attendance. New faces to the meeting are Paul Rupnick, KB3KOT and Pat Palazzolo (ex KA3WZP).

A **moment of silence** was observed for recent silent keys and other deserving persons.

A motion was made to **accept the minutes** of the May 2004 meeting as published in the newsletter. The motion was voted on and passed.

Committee reports:

**Treasurer (N3RDV):** Read and accepted.

**Secretary (KB3FZU):** No report.

**VE Report (N3ZEL):** The next session at Peter's Library is 15 July 2004 @7:00 PM.

**Repeaters (N3RNX & W3SRL):** No report.

**FM Net Report (N3HKQ):** W3SRL, N3SBF, KB3GMN, N0VLR volunteered to be on the FM NCS schedule. N3HKQ will develop an NCS schedule for July to December.

**Ways and Means (KB3GMN):** No report.

**Public Service (N3RDV):** 17-18 July 2004 Grand Prix.

**Contests (K3VX):**

- K3VX and W4ZE are chairing this year's Field Day at the Library Sportsman's Association.
- Set up 9:00AM Saturday and we will clear out by 3:00 PM Sunday.
- Need CW operators and night owls to operate over night.
- One CW station, 2 phone station, 1 digital (PSK31) station, and 1 GOTA station.
- Food people: W8LEV, KB3FNM, N3HKQ, K3PCF, and KB3HVN. N3RDV will get ice. They will meet after meeting to make plans.
- KB3IAC will supply batteries.
- N3HKQ will try to borrow a white board.
- Site preparation will be announced on the reflector.
- Dan, KB3HVN will bring to pop-up canopies.

**Newsletter (WN3VAW):** No report.

**President's Report (W3WH):**

- W3WH requested a current club roster. The roster will be posted to the N3SH reflector site where only members can access it.
- NW3X donated a 2-meter HT (Kenwood TH-205AT) to the club. Bill urged members to not be shy about using the HT any time.
- The PA QSO party is not too far off to begin making plans. W3WH and K3VX will operate from Ryerson State Park in Green County.
- KB3FZU, KB3IAC, and N3HKQ will likely operate from Fayette County.
- Members are asked to consider having the club picnic at a *Washington Wild Things* baseball game. Bill will pick two dates in August and let the club know.
- Carol KB3GMN was congratulated on winning second prize at the Breezeshooters Hamfest.

**Old Business:** No report.

**New Business:** Pat (KA3WZP expired but trying to renew), a USC middle and high school teacher is coordinating an ARISS contact with the ISS. She is trying to complete the application form and arrange a schedule to contact with ISS either in August or September. Ron WN3VAW, Jim WB4GCS, and Kevin N3HKQ will assist with the contact.

**Good of the Order:** Several members went in with the club to purchase a 500-ft spool of RG-8 coax. Steve will arrange for the order and take delivery. Glen, KE7FD brought his Rock Mite for a demonstration after the meeting.

**Motion to Adjourn:** Made by everyone, and seconded by everyone. The motion was voted on and passed. The meeting was adjourned at 20:25.

# WASH Spotlight



Dan KB3HVN, ah, resting his eyes at Field Day 2004

Photo courtesy of and ©Copyright 2004 Kevin Smith N3HKQ.

Every month we're going to feature a **WASH** club member, something about them, something they're involved in or a club-related activity that we're involved in, in the **WASH Spotlight**. Submissions for the Spotlight should be sent to Ron WN3VAW at [wn3vaw@njdxa.org](mailto:wn3vaw@njdxa.org)

## Monthly WASH Breakfast Saturday, July 31<sup>st</sup> & August 28<sup>th</sup>

Please join us for the next **WASH** Breakfast! We usually get together on the LAST Saturday of every month for a chance to informally sit down, shoot the breeze, compare notes, drink lots of coffee, and just have a good time!

We alternate our breakfast locations every month to make it easier for club members to get to at least one of them:

Join us in July at **The Starting Line Café** on Route 19 near Race Track Road, north of Washington, and in August at the **Your Way Café**, Caste Village Shops, Baptist & Grove Roads, Whitehall. Start time is about 8 AM until whenever. Monitor 146.955 & 443.650 for talk-in or any last minute changes.

All are welcome, **WASH** members or not, amateurs or not! See you there!

## Wireless Association of South Hills Membership

AA3FI	KB3GMO	KE7FD	N3SBF	W3HND	Barbara Misic David Delmonico
AA3JS	KB3GMP	KE8RN	N3SRC	W3JAF	
AB3AB	KB3GMU	KQ3DX	N3TBK	W3RJM	<b>Silent Keys</b> K3EED KB3ENX KB3FQT N3KEH N3OBD N3SKR W3ZLK
K3BZW	KB3GZG	NØPEU	N3UE	W3RWS	
K3JDS	KB3GUF	NØVLR	N3UIW	W3SRL	
K3LGM	KB3HFP	NØWPV	N3VEH	W3VE	
K3OL	KB3HVN	N2QIV	N3WPT	W3VFA	
K3PCF	KB3IAC	N3AWF	N3XFE	W3WH	
K3VX	KB3ICC	N3BSQ	N3XI	W4ZE	
K3WR	KB3IJC	N3CZZ	N3YPB	W8LEV	
K9LZ	KB3IRQ	N3FZ	N3YQY	WA3JPP	
KA3PPH	KB3IVW	N3HKQ	N3ZCG	WA3RVD	
KA3TFB	KB3IVX	N3IDH	N3ZEG	WB3BPH	
KA3UPY	KB3KOT	N3INT	N3ZEH	WB4GCS	
KA3WZO	KB3QX	N3KFD	N3ZEL	WB3GTL	
KA3YTS	KC2JJB	N3PN	N3ZNI	WN3BOJ	
KB3ANH	KC4WTT	N3QMV	N4MIS	WN3VAW	
KB3CPI	KC6VLV	N3RDV	NP2JF	WO3Z	
KB3DCO	KD3JV	N3RHT	N8DPW		
KB3EPI	KE3XB	N3RNX	W3GEL		
KB3ERQ					
KB3FNM					
KB3FZU					
KB3GMN					

**Color Codes:**  
 2004 Member  
 2003 Member  
 2002 Member  
 2001 Member  
 (2000 and earlier members no longer displayed)

Through June 11<sup>th</sup>, 2004

List compiled by

Mark Stabryla N3RDV, Vice President/Treasurer

Back Issues of the **WASHRag** have a new home on the web:

[www.djernes.org/washrag](http://www.djernes.org/washrag)

Thanks **NØPEU** for providing the new site!

## UPLC In Favor of BPL

Mary Alice Patterson, Media Relations Assistant, United Power Line Council  
Courtesy of [www.qrz.com](http://www.qrz.com)

Washington, DC, June 22<sup>nd</sup>, 2004 — The FCC's proposals are appropriate; NTIA's recommendations and ARRL's naysaying are misguided. The United Power Line Council (UPLC) forcefully replied to concerns about harmful interference from BPL in reply comments filed today, and urged the FCC to move forward quickly to develop rules that will encourage more development and deployment of BPL services to the public.

Specifically, UPLC expressed its concerns with findings and recommendations by the National Telecommunications and Information Administration (NTIA) that overstate the risk of interference from BPL. NTIA's proposals would place undue operating restrictions and impose arbitrary measurement guidelines that threaten to delay the deployment of BPL or preclude it altogether; however, the UPLC expressed its interest in working with NTIA going forward. Moreover, UPLC did agree with NTIA that BPL "has been studied to death already and the FCC should adopt rules without further delay."

Link to full text of UPLC Comments:

<http://gullfoss2.fcc.gov/prod...6214637> <[http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\\_or\\_pdf=pdf&id\\_document=6516214637](http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6516214637)>

UPLC reminded the Commission that BPL is not just another broadband access platform, but one that enables applications in ways that other technologies do not by providing enhanced utility applications, home networking, symmetric speeds, and low latency for a variety of services. Unique applications will improve the efficiency and reliability of electric service to utility customers as well as promote broadband competition for consumers, carriers and ISPs - saving lives, reducing electric generation costs, remedying the digital divide and conquering the DSL- cable duopoly.

UPLC also commented on amateur radio opposition to the technology, urging the Commission to ignore "armchair amateurs that still use vacuum tube transmitters" and listen to the reputable companies and entrepreneurs who are the real experts on BPL and who have overcome enormous technical obstacles to make BPL a reality in the U.S. All the field trials over the years in various parts of the country have shown that the risk of interference from BPL is extraordinarily low, because it produces only minimal radio frequency energy at a few points in the system. Moreover, these systems will incorporate adaptive interference mitigation capabilities that will effectively remedy any interference that might result to fixed and mobile operations in the High Frequency (HF) band (1.7-80 MHz).

"BPL is an exciting technology with a promising future, but it's dependent on the FCC to develop rules that will encourage companies to deploy systems, both for better electrical service and competitive broadband," stated Bill Moroney, President and CEO of UPLC. "If the goal of this Administration is universal affordable broadband access by 2007, BPL is the best hope of achieving it."

Founded in 1948, UTC represents the telecommunications interests of electric and gas utilities, water companies, gas pipelines and other critical infrastructure entities, along with their technology partners. UTC is a global federation of direct business members and affiliated trade associations representing over 10,000 organizations serving all corners of the world and virtually every community in North America. More information is available at <http://www.utc.org>

The United Power Line Council (UPLC) is an independent operating unit of the UTC. Utilities and their technology provider partners have joined to form the UPLC in order to drive the development of broadband over power line solutions in North America. The UPLC's efforts are focused in three strategic areas: market awareness, regulatory and legislative advocacy, and technical operability. The UPLC is an evolution of UTC's Power Line Telecom Forum (PLTF) that was created in 1998 as the source for information and advocacy in North America for this nascent industry. Additional information is available about UPLC at <http://www.uplc.org>.

For More Information, Contact Mary Alice Patterson, Media Relations Assistant (202) 833-6811 [mary.patterson@utc.org](mailto:mary.patterson@utc.org)

## Silent Keys



Marlon Brando FO5GJ / KE6PZH, 80, July 1<sup>st</sup>

## UPLC Comment Shows BPL Campaign Starting to Pay off

Courtesy of the American Radio Relay League

NEWINGTON, CT, June 29<sup>th</sup>, 2004 — ARRL President Jim Haynie, W5JBP, says a remark the United Power Line Council (UPLC) made recently about Amateur Radio shows that the League's BPL message is getting through. In its reply comments on the FCC's BPL Notice of Proposed Rule Making, the UPLC's Brett Kilbourne claimed that members of the BPL industry are the real experts on the technology, "not a misinformed set of armchair amateurs that still use vacuum tube transmitters." A subsequent UPLC press release repeated the swipe, drawing a storm of protest from the amateur community. Haynie said this week that he took comfort rather than offense at the intended affront.

"I thought that the comment was a good indicator that the work that the League has been doing on multiple fronts is beginning to pay off," Haynie said. The League's FCC filings, technical studies and information on BPL, he said, have made it "very embarrassing" for the BPL industry to keep insisting "that the emperor is wearing clothes," so it's resorted to name calling instead.

Haynie said he remains puzzled that the BPL industry appears unwilling to support its claims that "the risk of interference from BPL is extraordinarily low, because it produces only minimal radio frequency energy at a few points in the system," as the UPLC's press release asserts. Any harmful interference that does occur, the UPLC claims, can be "mitigated" using a variety of techniques, "including frequency notching or frequency shifting."

"Just saying 'We said it's not going to interfere' is not going to cut it," he said. Haynie challenged the BPL industry to sponsor independent, professional engineering evaluations of the technology's interference risk. "Let's see what they've got."

Haynie said that while he found the UPLC's "armchair amateurs" remark amusing, its severe criticism of the National Telecommunications and Information Administration (NTIA) Phase 1 BPL report and comments in the proceeding raised his eyebrows a bit. In its press release, the UPLC said "NTIA's recommendations and ARRL's naysaying are misguided" and that the UPLC has "forcefully replied" to interference concerns.

"For Mr Kilbourne to come out and say they [NTIA] don't know what they're talking about, he might as well shoot himself in the foot," Haynie said, pointing out that the White House, which is promoting BPL, is putting a lot of weight on the NTIA's recommendations.

In its comments, the UPLC characterized the NTIA's recommendations as "highly prescriptive and unreasonable." It said the NTIA's approach was "fundamentally at odds with the Part 15 rules" and "unjustified by the interference potential of BPL operations."

In response to the criticism leveled from the amateur community, the UPLC declared its "support for Amateur Radio remains unabated," but expressed concern for "uninformed armchair quarterbacking by a small number of amateurs." The UPLC also said it has "sought to work with ARRL," citing its offer to help resolve "a complaint in Cedar Rapids, Iowa."

Alliant Energy last week prematurely shut down its BPL pilot system in Cedar Rapids. Interference complaints from amateurs were a factor in the utility's decision.

## The Double-Edged Sword of BPL

Dick Boley N3HKN courtesy of [www.eham.net](http://www.eham.net)

While the Amateur community, and their representative organizations, rail against the BPL industry a more ominous issue looms on the horizon. Currently most Hams are fearful that BPL will cause significant interference to their operations. A high probability exists that this will slowly become true as BPL is deployed. The utilities have obviously done some homework and used the FCC database to avoid neighborhoods that have a population of Hams. Thus we see an essentially benign service that offers competitive services to the public that here-to-fore have been at the mercy of the cable and phone companies.

The ominous element is that Amateur Radio operators can possibly interfere with the BPL services using a tribander and 1.5kw pointed at a power line. What do you think will happen? Well, the BPL folks will descend upon Washington with a private jet full of lawyers. They will

(N3HKN Continued on page 8)

# WASH Field Day 2004 In Action...



Above: So THAT'S how the VHF/Satellite Station Works! Jim WB4GCS & spectators.

Below: The VHF antennas on top of the tower  
Photos courtesy of & ©2004 Kevin Smith N3HKQ



The Operating Bench, Saturday Daylight (Top), Sunset (Middle) and Night (Below). Photos courtesy of and ©2004 Larry Comden K3VX



(L—R\_ N3KFD & daughter, W3SRL, KB3CPI.  
Photo courtesy of and ©2004 Frank Bobro KB3FZU

# ...Or, Where Did All The Sideband Go?



I missed about half of Field Day this year but while I was there on Saturday it seemed very clear to me that everyone was having a good time. There was activity everywhere and I think that we may have achieved our goal of FUN for everyone.

We certainly ate well, our hosts took good care of us, the Bell family prepped the site for us, Larry and Ted made sure we had all the equipment we needed and we all worked well together.

I believe that everyone who wanted to get a chance to operate (a first!!) and even Murphy must have found somewhere else to spend Field Day.

I guess the only real downers I can think of is that the SSB positions were struggling for Q's (at least on Saturday) and we had a high intermittent noise level to contend with.

Thanks to everyone who contributed in any way but especially Carol's committee, Hank and Mary Lou, all the Bells, Steve Lane, Dan and of course Ted and Larry our Co- Chairmen.

If I missed anyone please forgive me.

Now let's start getting for the Pa QSO Party.....

— 73's Bill W3WH



**WASH Field Day Summary:** Total Bonus Points: 850  
 Call Used: N3SH CW: 502 QSO's / 1004 Points  
 GOTA Call: WA3SH Digital: 59 QSO's / 118 Points  
 Entry Class: 4A Phone 299 QSO's / 299 Points  
 Participants: 30 Total Points: 1421  
 Power Source(s): Battery Claimed Score = 2842

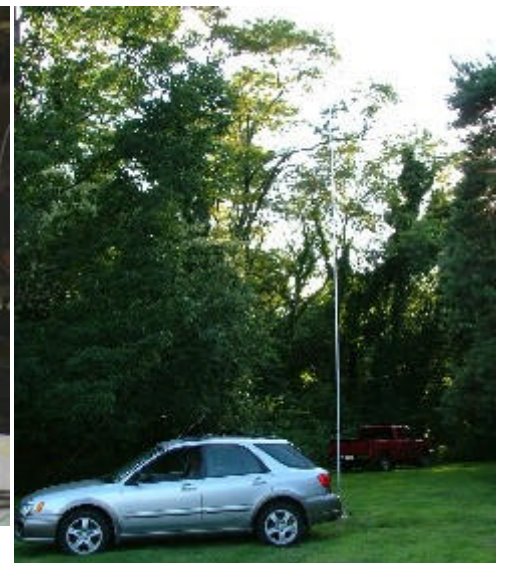


Ladies and Gentlemen: I'd like to thank you all for what has been one of the most enjoyable Field Days in several years. This was a good group, working hard, focused, but with FUN at the forefront of all efforts. And I did have FUN.

Thanks especially to Carol and many others who provided way too much good food to those of us who did way too little work. I can't wait until next year!

— Thanks & very 73, Jim WB4GCS

Above L—R: Jim WB4GCS, Dick N3QMV,  
 Center L—R: Paul NØVLR & Carol KB3GMN, Bill W3WH,  
 Below L—R: Shawn NØPEU, The Bells  
 Photos courtesy of & ©2004 Kevin Smith N3HKQ



(Above) Steve W3SRL (Left), Ted W4ZE (Center)  
 Photos courtesy of and ©2004 Larry Comden K3VX

K3VX Mobile Photo courtesy of & ©2004 Kevin Smith N3HKQ

(BPL Alliant Trial Continued from page 1)

"At least that's how we were looking at it," he said. "You have to find the right areas with the right topography with the right concentration of certain types of customers," he said. "And from our test standpoint, we didn't necessarily give perhaps as much merit to some of those criteria as we should have."

"It's never been in my mind that BPL has to compete with the speeds of cable today," Hinz added. "It has to compete with the speeds of cable and the next best thing tomorrow as well, if it's going to be usable well into the future."

Cedar Rapids already has established broadband providers. Hinz said the Alliant system was a test-stand operation that never reached the point of signing up any real customers, and its technology was "fixed in time." Other companies have gone beyond what Alliant was able to accomplish in Cedar Rapids, he asserted, and plan to move ahead with BPL. He hinted that Alliant might want to take another look at BPL once the FCC has put BPL rules and regulations into place, and the technology has further evolved.

Spencer and Hinz agree that the BPL situation was resolved without any rancor. Still outstanding are some chronic power line noise problems Spencer has experienced. "There's been ongoing dialogue," Hinz said "He helps keep our lines pretty clear up there."

The ARRL's formal complaint to FCC Enforcement Bureau Chief David H. Solomon called on the Commission not only to close down Alliant's BPL field trial system but to fine the utility \$10,000 for violating the Communications Act of 1934 and FCC Part 15 rules. In late May, ARRL Midwest Division Director Wade Walstrom, WØEJ, also called on Alliant Energy to shut down its BPL system "without delay" and not resume operation until "any and all interference issues have been fully resolved."

The ARRL became involved in Spencer's case after United Power Line Council President William R. Moroney invited the League in mid-March to keep his organization in the loop on any cases of BPL interference that were not being satisfactorily addressed.



(N3HKN Continued from page 5)

demand that the FCC curtail the operations of interfering radio transmitters. Guess who that is!

So, while we worry about the reception of BPL signals (interference) it is very likely that we will be blind-sided when the FCC asks us to show cause as to why we should not cease operations that interfere with BPL. If the FCC refrains from a Cease and Desist order to stop transmitting them, in all probability, will allow BPL utilities to raise their power levels to overcome the interference and restore this much need service to the public.

Gee, our original fear of interference to the reception of signals is now guaranteed. Thus the cycle will begin with only a black hole in sight.

**Fishing and chasing DX have much in common. The big one often gets away.**  
— Jack Ritter WØUCE



FYI Networks, an Internet Service Provider in Pittsburgh and surrounding areas since 1995, is offering all members of **WASH** their Basic Internet account for only \$18 / month. This includes one e-mail box, 3 MB of disk space, web page hosting, Telnet and FTP access. Call FYI toll-free at 1-877-

FYI4NET, or e-mail them at [sales@fyi.net](mailto:sales@fyi.net), for more details or to sign up. You **must** mention that you are a member of the **WIRELESS ASSOCIATION OF SOUTH HILLS** to get the discount rate.

FYI Networks now also provides sDSL service in selected areas. **WASH** Members can get DSL for the discounted rate of only \$47.50/month. A pre-qualification must be done to see if your address is in the DSL coverage area.

Call John Vasicek at 412-488-7800 for more information about FYI sDSL services & benefits.

Many thanks to FYI Networks for making these special offers available to us for the past seven years!

## DX News Briefs



NA8O plans to operate from Saipan as **KHØ/NA8O** early in July. He and friends will be QRV 20—6 meters, possibly 40 meters & the WARC bands with a long wire & auto-tuner. QSL via JK1FNL — JQ2GYU

Logs for **YO3APJ** through May 2004 have been uploaded to Logbook of the World. 150 pages of **9X5AA** logs are presently being transcribed and will be uploaded soon — W9OL

K8SIX is the QSL Manager for **T49C** for the 2004 June VHF Contest and 2003 Field Day operation. Please send an SASE with your request; QSL's without SA SE's will not be answered — K8SIX

Congratulations and condolences to Mike K3AIR, who has now become the "A" sorter for the ARRL W3 Incoming QSL Bureau. "Now I get my buro cards first (the ulterior motive, of course)" — K3AIR

QSL **KHØN** direct to JA6CNL. They do not go to W8CNL — W8CNL

Dov 4Z4DX has a new PO Box address. QSL for **9N7DX, 4Z4DX, VK3JDX, HBØ/MØDOV, JY8WW, ZC4DX, 5B4XX, TL8DX, ZF2AB, OK8DG, OM9ADX** and **4XØAI** via Dov Gavish, PO Box 1331, Ramat Hasharon, Israel 47112 or email him at [4z4dx@iarc.org](mailto:4z4dx@iarc.org) — VA3RJ

During the IARU World HF Championship, look for **W1AW/Ø** in Colorado from KØRF and KVØQ, and **NU1AW** in Vermont from K2LE & W2AX — ARRL

"For the 2004 IARU HF Championship, JARL will establish Headquarters stations in various regions of Japan (all in Honshu Island IOTA AS-007). This is the first time that we use "HQ" suffix instead of "JHQ" used until last year. All QSOs will be QSLed automatically via the buro. The stations include **8N1HQ, 8N3HQ, 8N4HQ** and **8NØHQ**." — JA1BPA

W1BHY will be QRV on 10—40 meters, CW SSB & RTTY, as 3D2BY from July 5<sup>th</sup>—14<sup>th</sup>. QSL via W1BYH — W1BYH, 425 DX

K8AA & K8AQM will be QRV as **5WØDL** & **5WØTR** July 7<sup>th</sup>—21<sup>th</sup>. They will be QRV in the IARU contest, possibly as **5WØXX**. QSL via K8 AA — NG3K

**CQ7M** will be QRV July 9<sup>th</sup> — 11<sup>th</sup>. QSL via CT1EHX or bureau — CT1END

Look for **OHØ/DC7VS, OHØ/DC7ER** and **OHØ/DL7NJ** to operate "holiday style" on SSB, CW, SSTV & PSK31 from the Aland Islands July 10<sup>th</sup> — 24<sup>th</sup>. QSL via home calls through the DARC bureau — NG3K

New contest call **ZL1V** will air f or the first time in the 2004 IARU contest from the ZL6QH station. QSL via N3SL — ZL1CT, 425 DX

**YR5ØØS** will be QRV in July to commemorate the 500<sup>th</sup> anniversary of the death of Moldavian King Stefan the Great. QSL via YO8KGA — N2YO

## QSL Routes

**4U1UN** via HB9BOU — W4YCH  
**5N9NDP** via IK5JAN — M5AAV  
**5R8FU** via SM5DJZ — N1NK  
**5U5Z** via G3SXW — RA3SL  
**5V7C** via F5TVG — W2IRT  
**7X2ARA** via DF2SA — ON7YX  
**9M2TO** via JAØDMV — RA3SL  
**9VØA** via VK4AAR — W9IXX  
**A52CQ** via S57DX — RA3SL  
**CD1C** via CE1VLY — K4KU  
**CN2R** via W7EJ — W2IRT, WØMM  
**CO8LY** via EA7ADH — W2IRT  
**CS6V** via DL5AXX — W9OL  
**E31AA** via ZL3CW — RW3RN  
**EK3SA** via DK6CW — W4YCH  
**EP2MKO** via UA6HCW — W9OL  
**ET3TK** via OK1CU — K4KU  
**HKØGU** via DL7VOG — W9OL  
**IR4X** via IK4QJH — W2IRT  
**KH2/NA8O** via JK1FNL — W4YCH  
**KZ5BC** (1975) via N4PN — KZ2I

**LPØH** via EA7FTR — W2IRT  
**LU3HIP** via EA7FTR — VA7EWW  
**P4ØL** via K5VWV — K5VWV  
**PJ4B** via K2SB — RA3SL  
**PX2A** via PY2TO — VA7EWW  
**R1FJ** via DL6ZFC — W2IRT  
**SN7Q** via SP7GIQ — W2IRT  
**SV5RDS** via SV5AZP — KS4YT  
**TJ3G** via G3TXF — RA3SL  
**TT8VMFR** via CT1GG — KU4BP  
**TU2WL** via IN3ASW — K4KU  
**V63TXF** via G3TXF — RA3SL  
**V5BR** via VK3QI — RW3RN  
**VQ9JC** via WB9IHH — JQ2GYU  
**XF1K** via N6AWD — RW3RN  
**XF4IH** via XE1IH — W4YCH  
**XW1HS** via E21EIC — KC1F  
**XX9TVR** via VR2KW — WB6RSE  
**Y92F** via SM1TDE — AB5C  
**ZK1EAA** via HB9EAA — ON7YX  
**ZWØS** via PS7JN — W9OL

Thanks to the NJDXA *DX News* & *DX Chat* Reflectors, the *DX-QSL* Reflector, *425 DX News*, *OPDX News*, *Diamond DX Club News*, *ICPO Bulletin*, & *ARRL DX Bulletin* for our *DX News* information. Thanks also to Bill Moore NC1L / ARRL DXCC Desk, & Bernie McClenny W3UR / *The Daily DX* for confirmations & additional information.





## WASH Classifieds

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**Amateur Radio Operators Needed for the Pittsburgh Vintage Grand Prix July 17<sup>th</sup>—18<sup>th</sup>!**  
**Interested? Call Corky N3MJP at (724) 626-0873 or (724) 217-5458**

## WASH Apparel Updates!

Dan KB3HVN & OGS Distributing are continuing to work on the upcoming web page link to permit WASH club members to order shirts, jackets, hats, and whatever direct from the club web page.

But in the meantime, if you still have one of the light blue SHARC "baseball" style windbreakers (these were the "2<sup>nd</sup> generation" jackets that Steve W3SRL handled the orders for, about 6 – 7 years ago) hanging in the closet collecting dust, good news! Dan has come up with a patch to "update" the jacket to the new WASH logo. Cost for the patch is \$9. The patch will be sewn directly onto the jacket; additional embroidery if desired at a small additional cost.

For more information, contact Dan & OGS Distributing at 412-655-8787

## A High School Senior's Reply Comments on the BPL NPRM

Benjamin S. Gelb KF4KJQ courtesy of [www.qrz.com](http://www.qrz.com)

I have been a licensed Amateur Radio operator for eight years, completed multiple physics and electronics courses and have countless hours of hands-on experience experimenting with radio and electronics equipment. I am a graduating senior at Thomas Jefferson High School for Science and Technology in Alexandria, Virginia and will be attending MIT in the fall.

The following are reply comments to various comments on the NRPM (04-37) by Current Technologies and Ambient Corporation.

Current Technologies asserts that "Current Technologies implementation of BPL is noninterfering." I dispute Current Technologies' assertion that "Current Technologies implementation of BPL is non-interfering." There seems to be a great division between those who believe BPL will be a source of harmful interference, and those who do not. I contend this division is not a result of "misunderstandings about how BPL works" on the part of amateur radio operators and many other individuals and organizations but rather a misunderstanding of basic physics on the part of both the Commission and Current Technologies.

Current Technologies states on page 14 that "Access BPL devices do not use power lines as antennas. They use power lines to conduct data signals, not radiate them." I'm sure that Current Technologies' goal is to conduct signals rather than radiate them. Unfortunately, Current Technologies, no matter how much they wish to deny it, is bound by the same laws of physics as every one else. When an RF current is coupled into a conductor, that conductor will radiate. Period. This is because of the electric and magnetic fields created by the charge and current on the conductor.

In coaxial cable the fields are contained by a shield at ground potential. In balanced line, equal and opposite fields from correctly spaced parallel conductors mathematically cancel. Power lines have RF characteristics that are irregular and variable, and do not resemble either type of feed line. Therefore, BPL systems that couple RF to the power line will cause the power line to radiate. Period.

This has been shown to be true in the real world. A video produced by the American Radio Relay League demonstrates actual received interference in four trial areas, one of which is operated by Current Technologies.

Because of the great disagreement between BPL promoters and those who stand to be impacted by the implementations of BPL systems, it seems that the Commission ought to be obligated to, at the very least, conduct some sort of real world testing of its own to determine the radiation characteristics of power lines. To date, no effort to validate the claims of either side has been made by the Commission.

So far, the Commission's attitude seems to be to accept the word of BPL manufacturers as fact, no questions asked, despite the fact that many statements made by BPL proponents and subsequently parroted by the Commission are embarrassingly nonsensical to someone with even the most rudimentary technical education (e.g. stating that the characteristics of a power line are "somewhere between a waveguide and an antenna" in the NPRM). Meanwhile, the Commission has dismissed actual testing and analysis conducted by many technically adept individuals, as well as organizations such as the ARRL, AMRAD, and the NTIA as "unsupported claims" that cannot "stand in the way of such an innovation as BPL."

Current Technologies states that the debate has been "complicated further by the existence of several different technical approaches to BPL, each of which works differently."

Current Technologies seems to say that while some implementations of BPL may cause power line radiation, its own implementation does not. This cannot be for the reason addressed previously - all BPL systems will cause power line radiation - but assuming for a moment that Current has found a way around the laws of physics, it is clear that each of the "different technical approaches" to BPL needs to be addressed individually in the new rules, because even if Current Technologies' implementation may not cause interference, other implementations will.

More curiously, no sufficient detail has been provided regarding the operations of ANY of the "different technical approaches" or what technical property gives Current Technologies' system the ability to prevent power lines from radiating. It boggles the mind to think that the Commission plans to implement effective new

(KF4KJQ Continued on page 10)

(KF4KJQ Continued from page 9)

rules without evaluating such technical details.

This is not a matter of science, but one merely of common sense. A wider signal bandwidth means that BPL signals will occupy a greater set of frequencies. Therefore there are more frequencies where interference may occur. An isolated interfering signal of narrow bandwidth often does not constitute harmful interference because, while annoying, it can be easily avoided by simply moving to another frequency. A broad band BPL signal, on the other hand, could quite easily consume an entire BAND of operating frequencies, which are normally only a few hundred kHz wide in the HF range. There is a grave difference between a single narrow band signal and a broad band one like BPL.

In its comments, Ambient cites President George W. Bush's recent speech on broadband technology. "So how is some guy in remote Wyoming going to get any broadband technology? Regulatory policy has got to be wise and smart as we encourage the spread of this important technology. There needs to be technical standards to make possible new broadband technologies, such as the use of high-speed communication directly over power lines. Power lines were for electricity; power lines can be used for broadband technology. So the technical standards need to be changed to encourage that.

Ambient strongly supports the President's conclusion that '... technical standards need to be changed to encourage ...' the use of high-speed communication directly over power lines."

Ambient supports the conclusion that "technical standards need to be changed," but what about that guy out in Wyoming? Ambient seems to have artfully chosen its words so it can later deny promises of rural broadband. This is because, as I explained in my original comments to the NPRM, Access BPL is no more viable in a rural area than cable or DSL service. For the benefit of the Commission, I have reproduced those earlier comments here (paragraph references refer to paragraphs in the NPRM).

Access BPL will not provide service to rural areas for the same reasons that cable and DSL are not available in rural areas. As is stated in paragraph 3, access BPL is a means of "last mile' delivery." A BPL signal can only travel a few thousand feet down a power line. Neighborhood distribution lines still must be connected to the Internet via fiber optic cable, as is outlined in paragraph 4. This is viable in an urban or suburban setting, where the number of potential customers can justify the cost of the fiber backhaul, but will not float in a rural environment. The Commission seems to subscribe to a misconception that the national power grid can be magically connected to BPL and turn every outlet in America into an Internet connection. This is not the case. A substantial amount of new infrastructure must be constructed in

the area of BPL service, and therefore will not promote BPL in rural areas any more than other broadband technologies.

As the promise of rural service is the sole pretense for the Commission's blind rush to deploy BPL at all costs, perhaps it might behoove the Commission to consider BPL for what it really is and reconsider its motivation for promoting it so relentlessly.

Ambient states that it "believes that such coexistence of BPL with other critical uses of spectrum is a goal which can be achieved."

The coexistence of Access BPL with other critical uses of spectrum is not a goal to be achieved; it is a BEDROCK REQUIREMENT for operation under the non-interference conditions of the Part 15 rules. Compliance to this condition must be demonstrated PRIOR to operation of Access BPL systems. To apply regulatory power in any other way would simply turn Part 15 on its head.

To quote from the Part 15 label on the back of a small electronic device on my desk, "this device may not cause harmful interference." This is a stark contrast from the interpretation of the rules regarding BPL, which goes something like, "BPL systems may cause interference, as long as some effort is made to correct said interference once it is identified by a party receiving interference." This is simply backward. The responsibility of identifying and initiating corrective action for interference must not fall on the licensed user of spectrum. Access BPL equipment must be conclusively proven to be able to operate under non-interference conditions through a thorough, documented technical analysis. To date, no such analysis exists.

There is a growing body of evidence, however, that suggests that Access BPL systems cannot be implemented without causing interference. Technical analyses by AMRAD, the ARRL and the NTIA point to a severe interference problem. An official interference complaint has been filed by E. Alan Crosswell, a resident who lives in the area of Ambient's BPL trial in New York.

In the interest of protecting licensed users of spectrum, the Commission must undertake some effort to more thoroughly evaluate the interference risks of BPL. To date, no thorough technical analysis exists that suggests BPL can be implemented in a manner consistent with the noninterference conditions of the Part 15 rules, and many analyses, as well as real world observation and simple physics, suggest the contrary.

Respectfully submitted,

Ben Gelb  
A.R.S. KF4KJQ  
104 Windover Avenue  
Vienna, VA 22180  
(703) 281-1371  
[ben@gelbnet.com](mailto:ben@gelbnet.com)

## **WACOM Hamfest 2004**

**Sunday, October 3<sup>rd</sup> 8:00 AM to 1:00 PM**

**Washington County Fair Grounds, Washington**

**Talk-In on W3CYO/R 145.490 & 443.300 MHz**

**For more information, contact Ed Oelschlager N3ZNI**

**60 Carl Avenue B-2**

**Eighty Four, PA 15330**

**(724) 746-9235 or [n3zni@arll.net](mailto:n3zni@arll.net)**

## **56<sup>th</sup> Annual Uniontown Gabfest & Tailgate**

**Saturday, September 4<sup>th</sup> 8:00 AM to ????**

**W3PIE Uniontown ARC Clubhouse**

**For more information, Carl Chuprinko WA3HQK**

**84 Heaven Hill Road**

**Morgantown, WV 26508-2626**

**(304) 594-3779**



# WIRELESS ASSOCIATION OF SOUTH HILLS, INC.

## Membership Application/Renewal for 2004



I would like to join WASH!. I am interested in the following type of membership:     **New Membership**     **Membership Renewal**

(check quarter \_\_\_\_\_ →)

(check one !)

	<input type="checkbox"/> 1st Qtr Jan-Mar	<input type="checkbox"/> 2nd Qtr Apr-Jun	<input type="checkbox"/> 3rd Qtr Jul-Sept	<input type="checkbox"/> 4th Qtr Oct-Dec
<input type="checkbox"/> (F1) Full Membership:	\$20.00	\$15.00	\$10.00	\$5.00
<input type="checkbox"/> (F2) Full Membership < 18 or > 65 yrs of age:	\$10.00	\$7.50	\$5.00	\$2.50
<input type="checkbox"/> (A1) Associate Membership:	\$10.00	\$7.50	\$5.00	\$2.50

(FM1) Family Membership (F1 or F2 or A1 dues x 20% x No. of household family members): \$ \_\_\_\_\_

Name(s): \_\_\_\_\_

Name: \_\_\_\_\_

Call Sign: \_\_\_\_\_

Address: \_\_\_\_\_

License Class: \_\_\_\_\_

City, State: \_\_\_\_\_

Expires On: \_\_\_\_\_

Home Phone: \_\_\_\_\_

Work Phone: \_\_\_\_\_

Email Address: \_\_\_\_\_

Birthday: \_\_\_\_\_

New Members Only:

I do NOT want to be added to the Club E-Mail Reflector

I do NOT want to be added to the Electronic Newsletter Mailing List

[If you have an Email address, you Will be added to both lists UNLESS you choose to Opt-Out]

ARRL Member?  Yes  No    Family ARRL Member?  Yes  No

Date: \_\_\_\_\_

Amount Enclosed: \$ \_\_\_\_\_

Signature: \_\_\_\_\_

Please make your check or money order payable to the club treasurer, Mark Stabryla.  
The Wireless Association of South Hills, Inc. reserves the right to accept or reject new memberships or renewals.  
Please return completed membership form along with check/money order to the club treasurer or mail to:

*Wireless Association of South Hills, Inc.*  
C/O Mark Stabryla N3RDV, VP/Treasurer  
1120 McKnight Drive  
Bethel Park, PA 15102-2456

## ***Juniata Valley ARC Hamfest***

**Saturday, August 7<sup>th</sup> 8:00 AM to ????**

**Decatur Township Fire Company Grounds,**

**4277 US Route 522 North, Alfarata PA (8 Miles East of Lewistown, PA)**

**Talk-in on 146.910 MHz**

**Designated a "Meet & Greet" Hamfest for the 2004 Pennsylvania QSO Party!**

**For more information contact Cliff Bell WB3IVX (717) 248-2616**

**Or E-Mail [wb3ivx@localnet.com](mailto:wb3ivx@localnet.com) or [k3qlz@localnet.com](mailto:k3qlz@localnet.com)**

## ***19<sup>th</sup> Annual North Hills ARC Hamfest***

***New Date!***

**Sunday, August 8<sup>th</sup> 8:00 AM to 2:00 PM**

**Northland Library, Cumberland Road, Wexford**

**Talk-in on W3EXW/3 147.09 MHz**

**For more information, e-mail [aa3ta@verizon.net](mailto:aa3ta@verizon.net)**

## Inside This Issue:

- Loads & Loads of Field Day Pictures!
- A BPL Test Shuts Down following Amateur Complaints on QRM!!!!
- An Industry lobbying group has their own (paid) opinion on BPL... have you used your old tube sets lately?
- A High School Senior comments on BPL — Worth Reading!
- **All this and more... waiting for your right inside these pages!!!**



*Field Day 2004:  
N3KFD at the GOTA Station*

Photo courtesy of and are ©Copyright 2004 Larry Comden K3VX

More **WASH** Field  
Day Photos  
Pages 6 & 7

## The WASHRag

Wireless Association of South Hills, Inc.  
Ron Notarius WN3VAW, Editor  
946 Sleepy Hollow Road  
Castle Shannon, PA 15234-2222



N3SH / WA3SH  
NP2SH/B  
[www.washarc.org](http://www.washarc.org)