

## HPL Technology - The Future of Ham Radio?? Hi, hi

Dave, W8UKQ forwarded the following inspired idea to the Zero Beat, and since we are going to need something to replace atmospheric propagation once BPL is in place, you might find this to be a solution:

"I've come up with a real neat idea but I am relying on the fine members of eHam to produce the hardware (since I am too stupid to do that myself.) Anyway, I would like to create an interface that will allow the transmission of amateur RF over power lines, hence "HPL technology" obviously meaning hamming over power lines.

Just think, no limits to the amount of power you could run (with a proper RF to AC mains interface) and since it's on a closed system, there may not be any rules regarding mode or band!!! Think of the pileups you will break running that old 8 foot tall Collins military 20-KW amp into your fuse box for an added kick!

As we know, power lines can carry a signal quite far and since it's a "closed system" and the power people already worked out the bugs and I am SURE they

won't mind sharing the technology with us hams.

Ham Heaven!!! No lousy covenants, silly antenna restrictions, unsightly towers or a homeowners association to deal with. No smelly coax or cables to be run around the house. The wife will be thrilled with this exciting new way of hamming! In fact, it gives grid squares and phased antennas a whole new meaning.

The beauty of this is that the power companies admitted that the system is flawless, the FCC's distinguished Mr. Powell (a well known engineer for many years and electronics inventor BTW, I forget his call sign... Please remind me.) agrees with them 100 percent and hams are assured and should not fear any problems with the up and coming BPL system.

In short this means no interference on our precious ham bands!!!

For those fuddy duddies not willing to move into the 21st century of ham radio, you will still have the old way of operation available to you. But this is just the boost Amateur radio needed, new

technology and more spectrum thru our AC outlets. We can now combine our HF gear with our computers so we can work that net and log 'em at the same time. Want to go portable, just find an outlet somewhere and set up shop.

I sure hope that W4RT, MFJ and some of the other manufacturers can supply an interface allowing us to spread our amateur goodwill thru the walls of America.

I hope to hear you soon on HPL...

73 and 60hz to you and your families."  
N2ZD

### De Olde Meeting Announcement

The next meeting of the Alliance ARC will be on Wednesday, June 2nd, in the cafeteria of the Alliance Community Hospital. Our meetings begin at 7:30 PM, and are an excellent opportunity for eyeball QSO's. Directions can be found on the K8LTG Repeater (145.370)  
See you there!

## Officers

### President

Bob Steele, K8RLS  
3755 South Union Ave.  
Alliance, OH 44601  
rsteele@alliancelink.com  
330-821-5011

### Vice-President

Joe Young, KC8TAC  
154 W. Grant St.  
Alliance, OH 44601  
ljyoung@cannet.com

### Secretary

Dave Glass, W8UKQ  
217 West Simpson St.  
Alliance, OH 44601  
w8ukq@juno.com  
330-823-4855

### Treasurer

Mary Ann Royer, KB8IVS  
6255 Sandalwood NE  
Canton, OH 44721  
kb8ivs@aol.com  
330-492-0703

### Trustees

James Lilley, N8XTJ  
67 E. Columbia St.  
Alliance, OH 44601  
330-821-1308

Frank Sanor, WA8WHP  
24462 St. Rt. 172  
Minerva, OH 44657  
wa8whp@juno.com  
330-894-2186

George Proudfoot, K3GP  
P.O. Box 343  
Louisville, OH 44641  
k3gp@arrl.net  
330-829-3859

### Editor

Larry Ashburn, KE8VE  
1080 W. Beech St.  
Alliance, OH 44601  
ke8ve@alliancelink.com  
330-821-9808

## Editorial

With the approach of summer and all the jobs that need to be done and no time to do even half of them, I haven't been keeping up on all the Ham Radio news very well. The main objective of the newsletter this month is to publish the Minutes and the Calendar of events. Many thanks to Dave, W8UKQ and Bob, K8RLS for submitting those.

The main topic of the meeting this month will be Field Day preparations. I'll try to have some copies of the Field Day rules at the meeting for anyone who needs a copy.

Ohio Section Manager, Joe Philips, K8QOE lost his wager with Michigan's SM, Dale Williams, WA8EFK on the outcome of the Ohio State - Michigan game and had to serve as Dale's slave, pack mule and chauffeur at the Dayton Hamvention this year. I haven't heard much about Dayton this year but I assume everyone who attended had a great time. Perhaps someone can enlighten us at the meeting. Maybe I'll make it to Dayton next year.

Hope to see everyone at the meeting.

73, de KE8VE

## Meetings

The Alliance Amateur Radio Club meets on the First Wednesday of every month, in the cafeteria of the Alliance Community Hospital. Talk-in is on 145.37 @. Meetings begin at 7:30 PM. Visitors are always welcome.

## Nets

Thursday is our "net night," with the following nets on tap:

### Ten meters

CW @ 8PM on 28.400 MHz  
SSB @ 8:30PM on 28.400 MHz

### 2 meters

9 PM on 145.37 MHz

## Internet

If you'd like to check us out on the web, our E-mail address is:

[w8lky@qsl.net](mailto:w8lky@qsl.net)

Our club home page is:

[Http://www.qsl.net/w8lky](http://www.qsl.net/w8lky)

## Newsletter Information

The Zero Beat is a publication of the Alliance Amateur Radio Club, P.O. Box 3344, Alliance, OH 44601

Unless otherwise noted, permission is freely granted to reprint portions of the Zero Beat, as long as credit is given to the author & source.

You can submit material to the Zero Beat either electronically, to ke8ve@alliancelink.com, in person, or via snail mail. I can read most word processor formats, but prefer your files to be in straight text, or Microsoft Word format.

## May Minutes

### ALLIANCE AMATEUR RADIO CLUB

May 5, 2004

The regular meeting of the Alliance Amateur Radio Club was held at the Alliance Community Hospital on May 5, 2004, at 7:30 P. M., with Robert Steele K8RLS, president, presiding. Secretary David Glass W8UKQ kept the minutes. There were 20 members and three guests present.

The Pledge of Allegiance was given, and introductions were made. Visitors, Glenn Smith, and Matt Kraner and XYL, were introduced.

The minutes of the regular meeting for April were published in the newsletter. The total of the treasury balance was reported for the month. There is an addition to the April minutes regarding a generator. Don K8OMO reported that there are generators available so that the club does not need to buy one. The report was approved.

Mary Ann KB8IVS reported

the treasury balances. The report was approved upon motion by Howard KC8YIF, seconded by Joe KC8TAC.

.Old Business: Nothing has been heard about the Salvation Army SATERN Net. Nothing will be done until information is received.

The CW character @ is formed by AC and is effective on May 3, 2004.

Don K8OMO moved to send QSL a donation of \$25 to enter their contest for equipment. The motion was seconded by Frank WA8WHP, and approved.

Larry KE8VE will follow up on the permit to use the Marlinton Middle School for Field Day. Don K8OMO suggested that the classification by 3A. The club station will be available for 15 meters. There will be a check-in station.

New Business: Mrs. Mayer, widow of Ernie Mayer W8WOW, has offered the radio equipment of the estate to the club. Don K8OMO suggested that we accept it and decide after Field Day what to do with it.

The Christmas Party will be December 18. Same prices PLUS tip and tax.

The FCC has approved ID Tags in the 70 cm. band. The Mile Branch Grange fair is after Field Day.

Joe KC8TAC reported that there will be a mock disaster drill at the hospital on May 20, at 3:30 PM. Listen to the weekly nets for more information.

George K3GP has an extra parking pass for Dayton. Two tickets to the BreezeShooters were won by Larry AA8NV and Larry KE8VE.

Don K8OMO displayed a 1921 spark key on a marble base.

Bob K8RLS reminded the club to write letters about BPL. See the newsletter.

The meeting adjourned at 8:21 PM upon motion by George K3GP, seconded by Jim N8XTJ.

Respectfully submitted,  
Dave Glass W8UKQ, Secretary

## THE WAYBACK MACHINE

ISSUE #6

by **Bill Continelli, W2XOY**

reprinted with permission

The Radio Act of 1912 was hopelessly obsolete by the early 1920's. Conceived in an era of long and medium wave spark telegraphy, the Act was totally inadequate when it came to broadcasting and the short-wave. The Department of Commerce gamely tried to stretch the Act to meet new requirements; the 1922 and 1924 "regulations" that banned broadcasting by amateurs, set up the broadcast band, and carved out the 160, 80, 40, 20, and 5 meter bands, were really nothing more than "gentlemen's agreements", valid as long as they weren't challenged.

For a time, they worked. Amateurs enthusiastically settled in on their new bands and began working the world, while the number of broadcasters in the new 550 to 1500 kc region jumped from 30 to almost 600 in just 3 years. Technical advances had not kept up with this growth, however, and there were problems. Crystal control of transmitters was still a couple of years away, and the unstable broadcasting stations drifted from their assigned frequencies, sometimes to the point of interfering with adjacent channels. Even stations off frequency by 400-600 cycles could cause ear splitting heterodynes. Most receivers of the 1920's were either regenerative or TRF (Tuned Radio Frequency), good on sensitivity, poor on selectivity. As a result, the 1920's broadcast band was saturated with only 600 stations. (Compare that to today's medium wave where tight frequency control of 20 Hz, coupled with directional antennas and selective superheterodyne receivers, allows over 4000 stations to occupy the AM broadcast band without undue interference).

The Department of Commerce, therefore, issued regulations mandating such solutions as time sharing (where two or more stations occupied the same frequency at different times of the day), and daytime only operations. Stations were constantly moved to another frequency, or told to decrease power, in order to minimize interference. The Department also went after stations whose transmitters drifted onto adjacent channels. An interesting example of this was the Los Angeles station of "Sister" Aimee Semple McPherson, an evangelist who was the leader of the International Church of the Four-square Gospel. Her station was notorious for drifting up and down the broadcast band. When the Federal Radio

Inspectors tried to keep her on frequency, she imperiously wrote to Secretary Hoover, demanding that his "Minions of Satan" stay away from her transmitter. The Almighty would choose her Wavelength, she wrote, not the Department of Commerce.

Many of the stations that had been moved, told to reduce power, or share their frequency, did what any patriotic American would do--hire a lawyer. Once the legal bloodhounds began digging, certain things came to light. Article I, Section 8, of the Constitution allows the Federal Government to regulate INTERSTATE commerce. Furthermore, it is an accepted fact that a Federal Agency cannot issue any regulations, unless it was given the power to do so by Congress. Thus, the lawyers for the disgruntled stations challenged the Secretary's "regulations" on two fronts, first, that the Radio Act of 1912 gave the Department no authority to regulate broadcasting stations, and second, that since many stations could not be heard across state lines, there was no "interstate commerce" and therefore no Federal jurisdiction. (This is the argument used by "Radio Free Berkeley" and other low power pirate stations).

The Day of Reckoning arrived in 1926 when an Illinois District Court held that there was no Federal Law to permit the Secretary of Commerce to assign broadcasting licenses or frequencies. The Attorney-General admitted that the Federal Government had no control over radio, except what was specifically authorized in the 1912 Act. Pandemonium broke out. Stations, liberated from all Federal control, upped their power, jumped frequency, and/or began full time operations on daytime or time shared frequencies. Smaller stations were jammed off the air. Unlicensed transmitters appeared out of nowhere, dropped down on any convenient (or inconvenient) frequency, and began broadcasting. Anarchy was King.

Amateurs, of course, could have legally joined in this RF orgy. There was nothing preventing them from going back to broadcasting, moving to new frequencies, exceeding the one kW limit, or anything else they desired. To their credit, they did nothing of the sort. One reason was the immense respect they felt for Secretary Hoover, a man who over and over publicly supported amateur radio in any way possible. They would abide by their "gentleman's agreement" with him. The other reason was common sense. They knew that Congress would soon rectify the problem by passing appropriate legislation. The broadcasters were "big boys" with a lot of money, powerful corporate backers, and 6 million listeners;

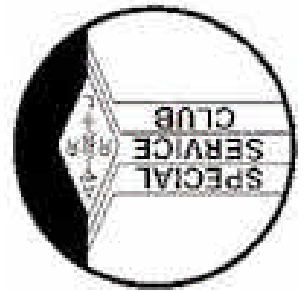
*(Continued on last page)*

# June 2004

Happy Birthday to: W8TUW, KC8SFS, Mrs. KE8VE, KG8RN, N8XTJ, NW8C.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday																																																	
<table border="1"> <tr><td colspan="7">May</td></tr> <tr><td>S</td><td>M</td><td>T</td><td>W</td><td>T</td><td>F</td><td>S</td></tr> <tr><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td></tr> <tr><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td></tr> <tr><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td></tr> <tr><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td></tr> <tr><td>30</td><td>31</td><td></td><td></td><td></td><td></td><td></td></tr> </table>		May							S	M	T	W	T	F	S	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31						<p><b>1</b></p> <p>STARK COUNTY ARES NET 7PM 147.120</p> <p>NORTHERN COLUMBIANA ARES NET 9PM 147.255</p>	<p><b>2</b></p> <p><b>AARC Meeting 7:30</b></p> <p>CARROLL COUNTY NET 8:00PM 147.075</p>	<p><b>3</b></p> <p><b>AARC NETS 8:00, 8:30, 9:00</b></p> <p><b>QCWA Net 7:30</b></p>	<p><b>4</b></p> <p>Major Six Club Contest</p>	<p><b>5</b></p> <p>IARU Region 1 Field Day, CW QRP TAC Sprint RSGB National Field Day <b>SILVERCREEK ARA VE, RITTMAN, OH</b> VK/Trans-Tasman 80m Contest, CW</p>
May																																																							
S	M	T	W	T	F	S																																																	
2	3	4	5	6	7	8																																																	
9	10	11	12	13	14	15																																																	
16	17	18	19	20	21	22																																																	
23	24	25	26	27	28	29																																																	
30	31																																																						
<p><b>6</b></p> <p><b>BreezeShooters Hamfest, Butler, PA</b></p> <p><b>W8TUW</b></p>	<p><b>7</b></p> <p>COLUM. COUNTY TRAINING NET 8:00PM</p> <p>RSGB 80m Club Championship, Data</p>	<p><b>8</b></p> <p>STARK COUNTY ARES NET 7PM 147.120</p> <p>ARS Spartan Sprint CUYAHOGA FALLS ARC VE, STOW, OH</p> <p>NORTHERN COLUMBIANA ARES NET 9PM 147.255</p>	<p><b>9</b></p> <p>CARROLL COUNTY NET 8:00PM 147.075</p>	<p><b>10</b></p> <p><b>AARC NETS 8:00, 8:30, 9:00</b></p> <p><b>QCWA Net 7:30</b></p>	<p><b>11</b></p> <p>MASSILLON NET 8:00PM 147.18</p>	<p><b>12</b></p> <p>ANARTS WW RTTY Contest ARRL June VHF QSO Party Asia-Pacific Summer Sprint, SSB</p>																																																	
<p><b>13</b></p> <p><b>Fulton County ARC Hamfest, Wauseon, OH</b></p>	<p><b>14</b></p> <p>COLUM. COUNTY TRAINING NET 8:00PM</p>	<p><b>15</b></p> <p>STARK COUNTY ARES NET 7PM 147.120</p> <p>NORTHERN COLUMBIANA ARES NET 9PM 147.255</p>	<p><b>16</b></p> <p>CARROLL COUNTY NET 8:00PM 147.075</p> <p><b>KC8SFS</b></p> <p>RSGB 80m Club Championship, CW</p> <p>SARL Kid's Day</p>	<p><b>17</b></p> <p><b>AARC NETS 8:00, 8:30, 9:00</b></p> <p><b>Mrs. KE8VE</b></p> <p><b>QCWA Net 7:30</b></p>	<p><b>18</b></p> <p>MASSILLON NET 8:00PM 147.18</p>	<p><b>19</b></p> <p>All Asian DX Contest, CW</p> <p><b>KG8RN</b></p> <p>Kid's Day Contest <b>Milford ARC Hamfest, Milford, OH</b> Quebec QSO Party SMIRK Contest West Virginia QSO Party</p>																																																	
<p><b>20</b></p>	<p><b>21</b></p> <p>COLUM. COUNTY TRAINING NET 8:00PM</p>	<p><b>22</b></p> <p>STARK COUNTY ARES NET 7PM 147.120</p> <p>NORTHERN COLUMBIANA ARES NET 9PM 147.255</p>	<p><b>23</b></p> <p>CARROLL COUNTY NET 8:00PM 147.075</p>	<p><b>24</b></p> <p><b>AARC NETS 8:00, 8:30, 9:00</b></p> <p><b>QCWA Net 7:30</b></p> <p>RSGB 80m Club Championship, SSB</p>	<p><b>25</b></p> <p>MASSILLON NET 8:00PM 147.18</p> <p>UK DX Contest, CW</p>	<p><b>26</b></p> <p><b>Field Day</b></p> <p>ARCI Milliwatt Field Day His Maj. King of Spain Contest, SSB</p> <p><b>N8XTJ</b></p> <p><b>NW8C</b></p>																																																	
<p><b>27</b></p> <p><b>Field Day</b></p> <p>Marconi Memorial HF Contest</p>	<p><b>28</b></p>	<p><b>29</b></p> <p>STARK COUNTY ARES NET 7PM 147.120</p> <p>NORTHERN COLUMBIANA ARES NET 9PM 147.255</p>	<p><b>30</b></p> <p>CARROLL COUNTY NET 8:00PM 147.075</p>	<table border="1"> <tr><td colspan="7">July</td></tr> <tr><td>S</td><td>M</td><td>T</td><td>W</td><td>T</td><td>F</td><td>S</td></tr> <tr><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td></tr> <tr><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr> <tr><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td><td>31</td></tr> </table>			July							S	M	T	W	T	F	S	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31							
July																																																							
S	M	T	W	T	F	S																																																	
4	5	6	7	8	9	10																																																	
11	12	13	14	15	16	17																																																	
18	19	20	21	22	23	24																																																	
25	26	27	28	29	30	31																																																	

*The only difference between a rut and a grave is the depth.*



Alliance Amateur Radio Club  
P.O. Box 3344  
Alliance, OH 44601

## Wayback Machine

*(Continued from page 4)*

they could afford to violate the spirit of the law and get away with it. Amateurs did not have this luxury. They realized that any violations of the 1922 and 1924 agreements, even if they were legally unenforceable, would cost them dearly in political support. So, while the 550 to 1500 kc segment was a free for all, the amateur bands were disciplined and orderly, as hams mastered the art of crystal control, and improved their operating skills.

Incidentally, one area in which those skills were honed was expeditions. From the Arctic to the Antarctic, from MacMillan to Byrd, amateurs provided the necessary communications of almost every major explorer. Also, in the area of emergencies, amateurs provided communications during snow and ice storms, hurricanes, earthquakes, and floods.

The Federal Government quickly moved to end the chaotic mess on the broadcast band. The Radio Act of 1927 was approved on February 23. This law defined "amateur radio" for the first time in a Federal statute, and created the Federal Radio Commission, which was given the power to classify and regulate all aspects of all radio stations for "the public interest, convenience or necessity". Criminal penalties were written into the 1927 Act for violations of the Act, or any regulation thereunder.

The Commission immediately went to work. "Minions of Satan" got Sister Aimee's station back on frequency, and

shut down the transmitter of KFKB, the station of "Dr." John Brinkley, graduate of the Eclectic Medical School and proponent of prostate operations and (get this) goat gland transplants to cure all medical ills. Patients by the thousands listened to KFKB's broadcasts, and flocked to Kansas to have the operations, picking out their goat from the pens next to the hospital as they went in. (Do you think I could make this up?) Unfortunately, after the Commission shut him down, "Dr." Brinkley went to Mexico by the Texas border, set up a 150,000 watt station, and continued his fraudulent operations.

In regards to amateur radio, the Commission, in effect, kept the status quo for the 15,000 hams. All agreements and regulations enacted by the Department of Commerce were maintained and incorporated into current regulations. The only change that hams noticed was the addition of a prefix on their calls, thus 1AW became W1AW, 1JS became W1JS, etc.

However, the existence of a sympathetic Commission and friendly regulations wasn't enough. Radio was truly international, and, as a result, an International Radiotelegraph Conference was scheduled in Washington, D.C., for October 4, 1927. Word was filtering out of Europe and the Far East that many governments were anti-amateur radio.

How would our hobby fare at this conference? Join us next time as "The Wayback Machine" shows us the answers.