



The W. A. COM Ham

Volume 1 Issue 4 May 2008

From “Bud” Plants, N3TIR, President....

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Some updates from Bud N3TIR

May 2008

Hello Club Members—

Field Day is coming very fast, we have been in contact with a few political members & news organizations of our community and we are expecting another good turnout this year.

Also our emergency net is 80% done, and in a short while you will be getting info on the process. I am waiting on feed back from the P.A. State Police on their info. Also I have a few more club members to contact.

See you at the meeting.

WACOM CLASSIFIEDS

We Are Kicking around another Idea this month about starting a club classified section either in the news letter or on the club web site. Bring your ideas to the meeting.

73's

Bud Plants

N3TIR

Ask the Technician

Dear Joe,

I have an older 2m rig that worked great in my car, but when I decided to move it into the house to use as a base station, I get reports of distorted audio and a humming or buzz with my voice. I put it back in my car, and it works great. What's happening?

Confused

What we seem to have here without actually being there to troubleshoot the problem sounds like a sagging power supply. It's probably NOT an antenna issue since that wouldn't cause audio distortion.

Here's where every Ham Shack needs a decent voltmeter, and every Ham needs to learn how to use it. If you take the volt meter and measure the power supply output with the rig turned off, it's probably somewhere around 13.75 VDC. It's probably close to that when the rig is turned on and receiving as well. Key the microphone while looking at the voltage, it's probably dropping to 8-9 Volts, which could cause improper biasing of the radio's internal circuitry, causing your problem.

Try low power and repeat the test, or buy a bigger power supply.

73 til next month,

Joe WA3WMB



Bill's Contest Corner

Contesting....Sometimes it takes a while to get your results, but it pays off in the mailbox in time. Just in the last few days I've received certificates from last year's Alabama QSO Party—High Score Pennsylvania in the category Single Operator, Low Power, Phone— and from last year's Florida QSO Party — First as Single Operator, Low Power in Pennsylvania and Fifth in the Country. Amazing. Seems that the results show up just in time to remind you to participate again this year. No problem, I'll be there. Just how well I can do will depend a lot on the conditions, but we're told they are only going to be getting better as we go further into the cycle. A few more years.

Sadly it seems that the Mid-Atlantic QSO Party has now been cancelled. When it was created there was an "open spot" on the sche-



dule, and there was a lot of interest in yet another contest. But now the reason seems to be that there is insufficient interest to continue the event. Perhaps if enough hams contact the organizers they may bring it back in the future.

If you are looking for events to work don't forget to check out the www.ng3k.com/misc/adxo.html for a running list of all announced DXPeditions. The ARRL site and weekly newsletter will have listings as well. Hope to hear you soon on the air.

73 all, and "gud DX"

de Bill, KB3LIX

Court Finds FCC Violated Administrative Procedure Act in BPL Decision —from the ARRL web site

The US Court of Appeals for the District of Columbia Circuit today released its decision on the ARRL's Petition for Review of the FCC's Orders adopting rules governing broadband over power line (BPL) systems. The Court agreed with the ARRL on two major points and remanded the rules to the Commission. Writing for the three-judge panel of Circuit Judges Rogers, Tatel and Kavanaugh, Judge Rogers summarized: "The Commission failed to satisfy the notice and comment requirements of the Administrative Procedure Act ('APA') by redacting studies on which it relied in promulgating the rule and failed to provide a reasoned explanation for its choice of the extrapolation factor for measuring Access BPL emissions."

The Court agreed with the ARRL that the FCC had failed to comply with the APA by not fully disclosing for public comment the staff studies on which it relied. The Court also agreed with the ARRL that the Commission erred in not providing a reasoned justification for its choice of an extrapolation factor of 40 dB per decade for Access BPL systems and in offering "no reasoned explanation for its dismissal of empirical data that was submitted at its invitation." The Court was not persuaded by the ARRL's arguments on two other points, on which it found that the Commission had acted within its discretion.

The conclusion that the FCC violated the APA hinges on case law. "It would appear to be a fairly obvious proposition that studies upon which an agency relies in promulgating a rule must be made available during the rulemaking in order to afford interested persons meaningful notice and an opportunity for comment," the Court said, adding that "there is no APA precedent allowing an agency to cherry-pick a study on which it has chosen to rely in part."

The Court continued, "The League has met its burden to demonstrate prejudice by showing that it 'ha[s] something useful to say' regarding the unredacted studies [citation omitted] that may allow it to 'mount a credible challenge' if given the opportunity to comment." Information withheld by the Commission included material under the headings "New Information Arguing for Caution on HF BPL" and "BPL Spectrum Trade-offs." The Court concluded that "no precedent sanctions such a 'hide and seek' application of the APA's notice and comment requirements."

With regard to the extrapolation factor, the Court ordered: "On remand, the Commission shall either provide a reasoned justification for retaining an extrapolation factor of 40 dB per decade for Access BPL systems sufficient to indicate that it has grappled with the 2005 studies, or adopt another factor and provide a reasoned explanation for it." The studies in question were conducted by the Office of Communications, the FCC's counterpart in the United Kingdom, and were submitted by the ARRL, along with the League's own analysis showing that an extrapolation factor closer to 20 dB per decade was more appropriate, as part of the record in its petition for reconsideration of the FCC's BPL Order. The Court said that the FCC "summarily dismissed" this data in a manner that "cannot substitute for a reasoned explanation." The Court also noted that the record in the FCC proceeding included a study by the National Telecommunications and Information Administration that "itself casts doubt on the Commission's decision."

The briefs for the ARRL were prepared by a team of attorneys at WilmerHale, a firm with extensive appellate experience, with assistance from ARRL General Counsel Christopher D. Imlay, W3KD. Oral argument for the ARRL was conducted by Jonathan J. Frankel of WilmerHale. Oral argument was heard on October 23, 2007; the Court's decision was released more than six months later.

After reading the decision, General Counsel Imlay observed, "The decision of the Court of Appeals, though long in coming, was well worth the wait. It is obvious that the FCC was overzealous in its advocacy of BPL, and that resulted in a rather blatant cover-up of the technical facts surrounding its interference potential.

(Continued on the next page)

Court Finds FCC Violated Administrative Procedure Act *(Continued from Page 3)*

Both BPL and Amateur Radio would be better off had the FCC dealt with the interference potential in an honest and forthright manner at the outset. Now there is an opportunity to finally establish some rules that will allow BPL to proceed, if it can in configurations that don't expose licensed radio services to preclusive interference in the HF bands."

ARRL Chief Executive Officer David Sumner, K1ZZ, added: "We are gratified that the Court decided to hold the FCC's feet to the fire on such a technical issue as the 40 dB per decade extrapolation factor. It is also gratifying to read the Court's strong support for the principles underlying the Administrative Procedure Act. Now that the Commission has been ordered to do what it should have done in the first place, we look forward to participating in the proceedings on remand, and to helping to craft rules that will provide licensed radio services with the interference protection they are entitled to under law."

ARRL President Joel Harrison, W5ZN, concluded: "I am very pleased that the Court saw through the FCC's smoke screen and its withholding of valid engineering data that may contradict their position that the interference potential of BPL to Amateur Radio and public safety communications is minimal. The remand back to the FCC regarding their use of an inappropriate extrapolation factor validates the technical competence of Amateur Radio operators and especially of the ARRL Lab under the direction of Ed Hare, W1RFI. We are grateful for the work of our legal team and especially for the unflagging support of the ARRL membership as we fought the odds in pursuing this appeal."

The Pittsburgh 250

This is the celebration of Pittsburgh's 250th birthday. Among the festivities and celebrations in Pittsburgh is a Special Event Station.

The dates of operation are August 2-3, 2008.

There are a number of Amateur Radio Clubs in the area that are already signed up for participation and more are joining in as the event develops.

WACOM, Wireless Association of South Hills, Skyview Radio Club.

Steel City, Breezeshooters, the Pittsburgh VHF Society.

And we have just had Two Rivers Amateur Radio Club join the list.

We will have more information available at meetings and on the internet.

There will be links set up shortly from our own website.

Keep this event in mind. We will welcome any and all operators.

It's Antenna Time

By Bud Plants

Here in Pennsylvania, the daffodils are blooming and the birds are singing. That means only one thing--it's antenna time!

The "Loop Skywire"

The concepts behind the full-wave loop antenna have been known for many years, but the antenna has become more popular after the publication of the article, "The Loop Skywire" in the November 1985 issue of QST. This article is available as a PDF from the ARRL website, if you are a member (<http://www.arrl.org/members-only/tis/info/pdf/8511020.pdf>). A lot more information is available on Internet. Just Google "loop skywire," and you'll find hundreds of references.

Basically, the antenna is a full-wave loop of wire for the lowest band that you wish to operate. For 80m, that would be about 272 feet. For 40m, the length will be 136 feet. Ideally, you'd like to set up the loop so that the area inside the loop is at its maximum. This occurs when the loop is a circle. Unfortunately, that's usually impractical. From a practical point of view, most guys shoot for a square configuration using four supports.

Another consideration is how to feed the antenna. The Loop Skywire article calls for a coax feedline, but the practice these days seems to favor ladder line. The reason for this is that the SWR on bands higher in frequency than the band for which the antenna was cut can be quite high. Coax is quite lossy when the SWR is high, but that's not the case with ladder line.

How does it perform? Well, it's been my experience that guys with loop antennas often have the strongest signals here at N3TIR. And they seem to get through even when band conditions are poor. Guys who use them also report that they are great DX antennas as well. So, all things considered, it sounds like it's worth a shot.

The Windom Antenna that I use the most. The Windom antenna is an antenna that I've just become familiar with. It's intriguing because, like the loop antenna, it is also a multi-band antenna.

The Windom is a half-wavelength antenna, but instead of feeding the antenna in the middle as you would a dipole antenna, you feed it about 1/3 of the way from one of the ends. At this point, the feedpoint impedance is about 200 ohms. With a 4:1 balun, you can feed it with 50-ohm coax. The interesting thing about this antenna is that the feedpoint impedance is 200 ohms not only on the fundamental frequency, but it's close to 200 ohms on all harmonics of that frequency. So an antenna cut for 40m, will also have a feedpoint impedance close to 200 ohms on 20m, 15m, and 10m. You do need a 4:1 balun for this antenna to operate properly. Fortunately, these are not difficult to make. I made one a couple of years ago, just for fun (<http://kb6nu.com/even-more-fun-with-baluns/>). Now, I have an application for it!

There's all kinds of information on the Net about the Windom antenna as well. One of the Web pages I found most useful was written by W8JI (http://www.w8ji.com/windom_off_center_fed.htm). I certainly have my hands full this antenna season. Whatever you decide to put up, **remember to be safe.**

~~~FIELD DAY REMINDER~~~FIELD DAY REMINDER~~~

IF YOU ARE BRINGING A LAPTOP TO USE AT FIELD DAY IN THE NETWORK LOGGING, PLEASE BRING IT TO THE NEXT REGULAR MEMBERSHIP MEETING. KEVIN, KB3JHO, WILL BE SETTING UP THE SOFTWARE ON THE LAPTOPS AND CONFIGURING THE NETWORKING. HE WOULD LIKE TO GET AN EARLY START TO AVOID PROBLEMS IN THE MIDDLE OF THE NIGHT (YES, IT HAS HAPPENED). THANK YOU.

Ten New Satellites in Orbit

From ARRL Headquarters
Newington, CT April 28, 2008
To all radio amateurs

SB SPACE ARL ARLS004
ARLS004 Ten New Satellites in Orbit

Ten satellites reached orbit April 28 aboard an Indian PSLV-C9 rocket launched from the Satish Dhawan Space Center. The primary payloads were India's CARTOSAT-2A and IMS-1 satellites. In addition to the NLS-5 and RUBIN-8 satellites, the rocket carried six CubeSat research satellites, all of which communicate using Amateur Radio frequencies. All spacecraft deployed normally and appear to be functional at this time.

The SEEDS satellite is designed and built by students at Japan's Nihon University. When fully operational, SEEDS will download telemetry in Morse code and 1200-baud FM AFSK packet radio at 437.485 MHz. The satellite also has Slow-Scan TV (SSTV) capability. Several stations have reported receiving SEEDS CW telemetry and the team would appreciate receiving more reports from amateurs at their ground station Web page.

AAUSAT-II is the creation of a student team at Aalborg University in Denmark. It will downlink scientific telemetry at 437.425 MHz using 1200 or 9600-baud packet.

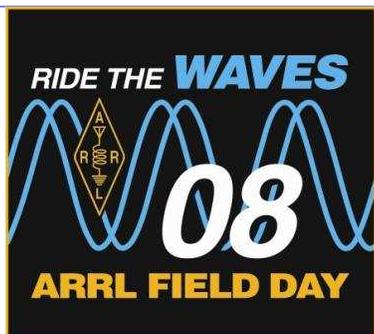
Can-X2 is a product of students at the University of Toronto Institute for Aerospace Studies, Space Flight Laboratory (UTIAS/SFL). Can-X2 will downlink telemetry at 437.478 MHz using 4 kbps GFSK, but the downlink will be active only when the satellite is within range of the Toronto ground station.

Compass-One was designed and built by students at Aachen University of Applied Sciences in Germany. The satellite features a Morse code telemetry beacon at 437.275 MHz. Compass-1 will also provide a packet radio data downlink, which will include image data, at 437.405 MHz.

Cute 1.7 + APDII is a satellite created by students at the Tokyo Institute of Technology. This satellite will not only provide telemetry, it will also offer a 9600-baud packet store-and-forward message relay with an uplink at 1267.6 MHz and a downlink at 437.475 MHz.

Delfi-C3 was designed and built by students at Delft University of Technology in the Netherlands. It includes an SSB/CW linear transponder. The satellite will be in telemetry-only mode for the first three months of the mission, after which it will be switched to transponder mode. Delfi-C3 downlinks 1200-baud packet telemetry at 145.870 MHz. The linear transponder, when activated, will have an uplink passband from 435.530 to 435.570 MHz and a corresponding downlink passband from 145.880 to 145.920 MHz.

NNNN/EX



This year the ARRL has provided a site for us to register our Field Day location. This allows the public to find us if they want to participate in Field Day. We get to do what we do best, talk to people about Amateur Radio. Let them have some fun and hopefully get them hooked on one of the greatest hobbies around. Visit our club web site at www.wacomarc.org to see our link, or visit the ARRL web site www.arrl.org for more information on Field Day operations.

Minutes of the General Membership Meeting April 3, 2008

Meeting called to order by Kevin Beatty

Minutes of March membership meeting distributed

Motion to accept: WA3WMB Sec: N3ZNI

Treasurers Report: Part of BOD minutes, Checking \$ 3991.62 Other balances are the same.

Repeater: Working fine

ARES/RACES: Run for Alex is on again June 7th 2008. We have been invited back

Net Status: Could use more checkins

Candy Sales: Candy is available tonight if anyone wants to take some

Technician Classes: On schedule General Class is about ½ complete

Audit Committee: Nothing to report

Flag Pole & Trailer repairs: Still waiting on weather

Field Day: Will need 5 laptops for network on FD. Joe F will do the food; Joe also has a UPS for the router and host computer

N3IDH: Old computer stuff is going to the dumpster

Pgh 250: Question on what it is, Spec Event station(s) for Pittsburgh 250th anniversary

Monthly breakfast has been proposed; think about possible plan and location

Fox Equipment: Unknown if any remains

N3IDH: Need to get an antenna for Chelsea Evans

Hamfest: General discussion

Motion to adjourn W3CYO Sec: WA3WMB

Attendance: WA3WMB, N3WMV, AB3FQ, Denny & Debbie Schwing, N3GHR, MONK, KB3OMH, W3CYO, KC3HW, KB3JHO, KA3YJY, KB3AAG, N3IDH, KA3VOM, N3ZEL, WA3CED, N3ZNI, KB3LIX

Bill, KB3LIX

W1AW SPRING/SUMMER OPERATING SCHEDULE

SB QST @ ARL \$ARLB005
 ARLB005 W1AW 2008 Spring/Summer Operating Schedule

ZCZC AG05
 QST de W1AW
 ARRL Bulletin 5 ARLB005
 >From ARRL Headquarters
 Newington CT March 10, 2008
 To all radio amateurs

SB QST ARL ARLB005
 ARLB005 W1AW 2008 Spring/Summer Operating Schedule

Morning Schedule:

Time	Mode	Days
1300 UTC (9 AM ET)	CWs	Wed, Fri
1300 UTC (9 AM ET)	CWf	Tue, Thu

Daily Visitor Operating Hours:

1400 UTC to 1600 UTC - (10 AM to 12 PM ET)
 1700 UTC to 1945 UTC - (1 PM to 3:45 PM ET)
 (Station closed 1600 to 1700 UTC (12 PM to 1 PM ET))

Afternoon/Evening Schedule:

2000 UTC (4 PM ET)	CWf	Mon, Wed, Fri
2000 " "	CWs	Tue, Thu
2100 " (5 PM ET)	CWb	Daily
2200 " (6 PM ET)	RTTY	Daily
2300 " (7 PM ET)	CWs	Mon, Wed, Fri
2300 " "	CWf	Tue, Thu
0000 " (8 PM ET)	CWb	Daily
0100 " (9 PM ET)	RTTY	Daily
0145 " (9:45 PM ET)	VOICE	Daily
0200 " (10 PM ET)	CWf	Mon, Wed, Fri
0200 " "	CWs	Tue, Thu
0300 " (11 PM ET)	CWb	Daily

Frequencies (MHz)

 CW: 1.8175 3.5815 7.0475 14.0475 18.0975 21.0675 28.0675 147.555
 RTTY: - 3.5975 7.095 14.095 18.1025 21.095 28.095 147.555
 VOICE: 1.855 3.990 7.290 14.290 18.160 21.390 28.590 147.555

W1AW SPRING/SUMMER OPERATING SCHEDULE Continued

Notes:

CWs = Morse Code practice (slow) = 5, 7.5, 10, 13 and 15 WPM

CWf = Morse Code practice (fast) = 35, 30, 25, 20, 15, 13 and 10 WPM

CWb = Morse Code Bulletins = 18 WPM

CW frequencies include code practices, Qualifying Runs and CW bulletins.

RTTY = Teleprinter Bulletins = BAUDOT (45.45 baud) and AMTOR-FEC (100 Baud). ASCII (110 Baud) is sent only as time allows.

Code practice texts are from QST, and the source of each practice is given at the beginning of each practice and at the beginning of alternate speeds.

On Tuesdays and Fridays at 2230 UTC (6:30 PM ET), Keplerian Elements for active amateur satellites are sent on the regular teleprinter frequencies.

A DX bulletin replaces or is added to the regular bulletins between 0000 UTC (8 PM ET) Thursdays and 0000 UTC (8 PM ET) Fridays.

In a communications emergency, monitor W1AW for special bulletins as follows: Voice on the hour, Teleprinter at 15 minutes past the hour, and CW on the half hour.

FCC licensed amateurs may operate the station from 1400 UTC to 1600 UTC (10 AM to 12 PM ET), and then from 1700 UTC to 1945 UTC (1 PM to 3:45 PM ET) Monday through Friday. Be sure to bring your current FCC amateur license or a photocopy.

The complete W1AW Operating Schedule may be found on page 97 in the March 2008 issue of QST or on the web at, <http://www.arrl.org/w1aw.html> .

NNNN
/EX

~~~ FIELD DAY NOTICE ~~~ FIELD DAY NOTICE ~~~

FOOD: Joe, WA3WMB, is organizing the food. This is a very important Part of Field Day, ask any ham who has participated. Be sure to let Joe know what you plan to bring or ask what he might need. A sign-up sheet will be at the meeting this coming Thursday, May 1st.

OPERATIONS: Bill, KB3LIX, would like to have operators available for through the night. We have lost operating time in the middle of the night. If you can give an hour or two in those wee hours be sure to let him know. Again, a sign-up sheet will be available at the meeting Thursday, May 1st.

Washington Amateur Communications**Club Officers**

President: Bud Plants, N3TIR;

bud@bnelectronics.com

Vice President: Kevin Beatty, KB3JHO;

KB3JHO@arrl.net

Secretary: Bill Sheehan, KB3LIX;

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Treasurer: Ed Oelschlager, N3ZNI;

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n3zel@fyi.net

We're RadioActive!!!

We're on the Web
www.wacomarc.org

**Have you been a radio amateur for 25 years or more?
Were you originally licensed 25 years ago or more,
even if not continually?**

Well then please join us at the Quarter Century Wireless Association, Chapter 6 quarterly luncheon at Rocky II's. Located on PA Rt. # 51, just north of McKees Rocks, in Stowe Twp. at the Fleming Park bridge.

Join our members who are like you, the foundation of amateur radio. There is much we can learn from them and from each other. And it's fun too.

No reservation necessary.

Our next quarterly luncheon will be in June, 2008, so you have lots of time to plan ahead to join us.

Contact Jacque, N3ZEL at n3zel@fyi.net for information.



YLS AND XYLS

There is an organization for you. It's called the
Young Ladies Radio League.

Come join other Lady Hams and enjoy the fellowship.

See all we have to offer at

www.qsl.net/yrl/index.html or contact Jacque,

N3ZEL at n3zel@fyi.net

HAMFESTS

May 16th – 18th 2008

Dayton Hamvention! **The big daddy!** Location: Hara Arena, 1001 Shiloh Springs Road. <http://www.hamvention.org/>

May 30th to 31st 2008

Rochester Hamfest. Location: Monroe County Fairgrounds Rt. 15A Rochester NY. Talk-in: ?
Contact: info@rochesterhamfest.org ARRL Atlantic Division Convention! <http://www.rochesterhamfest.org/>

June 1st 2008

52nd Annual Breeze Shooters Hamfest & Computer Show **This is the biggest area hamfest!** Location: Butler Farm Show Grounds. Route 68 East of Butler. Talk-in 147.300+, Contact: Robert W. Benna, N3LWP hamfest at n3lwp@verizon.net <http://www.breezeshooters.net> Breakfast and lunch served VE testing.

July 13th 2008

North Hills ARC hamfest. Northland Public Library, 300 Cumberland Road. McCandless Township 15237. Talk-in 147.090+. Contact: Gorman, N3RQD n3rqd@earthlink.net <http://www.nharc.org> Breakfast and lunch served

July 20th 2008

Somerset County Amateur Radio Club. Location: Somerset County Vo-Tech School Talk-in: 147.195 123.0pl. Contact: Stewart Saylor, AK3J ak3j@arrl.net <http://www.k3smt.org/>

August 24th 2008 ARRL Section Convention!

Skyview Radio Society 48th annual Swap N Shop! Location: Skyview Radio Society clubhouse grounds. 2335 Turkey Ridge Road. New Kensington, PA 15068. Talk-in: 146.640- 131.8pl. Contact: Robert Boehmer, KG3F at SkyviewHamfest2008@verizon.net Map and directions at www.skyviewradio.net Breakfast and lunch served

August 30th 2008

Uniontown ARC Gabfest. Location: Uniontown ARC club grounds, on Old Pittsburgh Road just off of Rt. 51 and Rt. 119. Talk-in 147.045+ 131.8pl. Contact: Tony Alviar, KA3VOR (724) 430-1277 (M-F 8-4); newsletter@w3pie.org www.w3pie.org Breakfast and lunch served, free admission

November 2nd 2008

WACOM ARC Hamfest. Location: Washington County Fairgrounds on Main Street Extension. Talk-in 145.490- 131.8pl. Contact Ed Oelschlager, N3ZNI (724) 986-9371 or n3zni@arrl.net Free coffee all day, breakfast and lunch available. Map and directions at www.wacomarc.org

The United States Power Squadrons Amateur Radio Club

Invites you to join us
on the air from



W-1-A-W

The Hiram Percy Maxim
Memorial Station at ARRL
Newington, Connecticut

7 and 8 June 2008

In honor of National Safe Boating Week, USPS will
operate the celebrated W1AW station.

Come join USPS and ARRL on the air.



For more details, contact
Donald Stark, N3HOW
DonStarkN3HOW@gmail.com

www.usps.org

