The Illuminator

The monthly newsletter of the Carbon Amateur Radio Club

June 2004

June Meeting

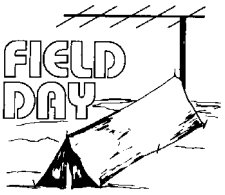
The next regular meeting of the Carbon Amateur Radio Club will be held on Thursday, June 17, at 7:30 p.m. at the EMA Center in Nesquehoning. We expect Field Day plans to be finalized at this meeting. See you there!

Treasurer's Report

By John, W3MF

As of the May Meeting:

Previous Balance (From April Meeting)	928.17
Receipts (dues)	15.00
Subtotal	943.17
Disbursements (newsletter)	5.55
Final Total	937.62



This year, the Carbon Amateur Radio Club will operate ARRL Field Day from the home of Bill, KA3UKL, and Lisa near the Beltzville Lake in Lehighton. As usual, Field Day is on the fourth full rainy weekend in June, which is June 26 and 27 this year.

The following members (in no particular order) have confirmed that they will attend:

W3MF
N3AT
KB3BYT
K3PH
KO3M
WB3W
KA3UKL (good thing, too!)
K3NG

Current plans call for the club to operate in Class 2A, i.e., two HF stations. Unlike last year, we plan to operate at 100 watts and use a generator. We will try to erect the club's A3 tribander, to increase our signal strength on the high bands. Additionally, we will try to get an elevated antenna for two meters, so the VHF fans can have fun, too!

We're looking for more volunteers for this event. If you are interested, please e-mail the club's e-mail list.

Why I am Glad to be a Ham

By Richard, WB2CRD

I'm glad to be a ham because hams like to run. Instead of running away, they run to help.

I'm glad to be a ham because hams were patriotic back when it was still considered uncool.

I'm glad to be a ham because I've been accepted by them, anywhere I go in the country.

I'm glad to be a ham because they try to be fair.

I'm glad to be a ham because I've never had one release their dogs just to scare my handicapped son (who's afraid of dogs), the way I've seen some of my non-ham neighbors do.

I'm glad to be a ham because there are too many reasons to count....

(add your own reasons here)



Virginia City, BPL Provider Part Ways; Pepco Opts Out of BPL Investment

(From the ARRL Letter)

The City of Manassas, Virginia, and broadband over power line (BPL) franchisee Prospect Street Broadband have parted company, and the city is seeking a new business partner. The decision to terminate the joint venture was mutual, according to city officials, and the city has acquired Prospect Street's interests. Manassas was planning to open bids from prospective replacement BPL providers June 7.

ARRL CEO David Sumner, K1ZZ, called the failure of the Prospect Street-Manassas deal just another example of a BPL deployment decision gone awry. He also predicted that BPL would not prove to be the revenue generator the city anticipates. Under the franchise agreement, Manassas receives 10.5 percent of BPL revenue and is responsible only for the relatively small cost of equipment installation. The failure of the franchise agreement leaves the city with obligations that far exceed revenues, however.

The first municipally owned utility to offer citywide BPL, Manassas has changed the name of its project from the Broadband over Powerline Enterprise to the Telecommunications Services Enterprise. City budget documents indicate that Manassas is prepared to loan $400,000 to the Telecommunications Services Enterprise Fund "to finance operating expenses" in Fiscal Year 2005.

The city's small BPL field trial involved fewer than a dozen homes and businesses in an area with underground utility wiring and no nearby Amateur Radio licensees. "Results of the eighteen-month pilot program were favorable and demonstrated BPL as a viable technology for the delivery of data services," the city's bid invitation declares. The city approved full-scale BPL deployment last October and started offering the service in February. The contract with Prospect Street Broadband apparently was terminated several weeks later.

The city's glowing pro-BPL comments on the FCC's Notice of Proposed Rule Making in ET Docket 04-37, filed May 3, neglect to mention the cancellation of the Prospect Street agreement.

The comments also say the city "remains sensitive" to Amateur Radio's interference fears. Manassas Utilities Director Allen P. Todd, W4VUB, has met with members of the Ole Virginia Hams (OVH) Amateur Radio Club to address their concerns, the comments note, and a BPL connection was set up in the home of OVH member Bob Zaepfel, K4HJF. The city made a letter from Todd describing its efforts to cooperate with local amateurs part of its comments to the FCC. That letter says that during informal tests in early April, OVH members were "unable to identify any interference in the amateur bands being caused by BPL installation." Todd's letter did not provide test details.

The Manassas Journal Messenger reported this week that two neighborhoods now are fully equipped for the service, and, to date, 200 customers are using the service, although the bid proposal says the city's deployment of BPL "passes more than 2000 homes with the fiber infrastructure passing more than 4,000 homes, and fiber construction continuing each day." Manassas charges $28.95 a month for its BPL service. The city is supposed to complete its citywide BPL rollout by this fall. City officials told the Journal Messenger that the Prospect Street contract termination will not affect BPL delivery.

Elsewhere, Pepco, a utility serving 700,000 Washington, DC, and Maryland customers, and its parent company, Pepco Holdings Inc, have decided to forgo any investment in BPL. Pepco continues to operate a BPL field test in Potomac, Maryland. The utility is continuing discussions with BPL partner Current Technologies and has indicated it's open to proposals to lease access to their power lines to deliver broadband service.

Pepco was said to be less interested in delivering broadband than in finding ways to improve its billing systems. A company spokesperson said the decision not to invest in BPL applies to all Pepco Holdings Inc companies.

Additional information on BPL and video clips from field trial sites are on the ARRL Web site http://www.arrl.org/bpl/.

FCC Seeks Assistance in Illegal Equipment Sales

(From the ARRL Letter)

The FCC says it's taking a close look at reports alleging sales of illegal (non-FCC certificated) radio equipment in various venues. "The Federal Communications Commission receives hundreds of complaints about alleged illegal equipment being offered for sale on the Internet or in publications," the FCC's Consumer and Governmental Affairs Bureau said. "If you have any information about illegal or uncertificated equipment being offered for sale, please forward it to the FCC." The Commission says the sorts of useful information it's looking for would include an original advertisement or Web address where the illegal equipment is being advertised or offered for sale, highlighting the types of equipment about which the allegations are being made, the name of any Web auction site, the exact item number and auction opening and closing dates, and the name and address of the individual or business offering the item(s) for sale. The FCC also asks complainants to specify why they believe the equipment is not in compliance with FCC rules and the number of pieces or types of equipment about which the allegations are being made. Complainants should provide a name and telephone number to follow up, if necessary. The FCC said the information can remain confidential, if requested. E-mail information to the FCC fccinfo@fcc.gov or send it via USPS to the FCC, Consumer and Governmental Affairs Bureau, 445 12th St SW, Washington, DC 20554.

NTIA Tips Hands on its Additional BPL Findings

(From the ARRL Letter)

National Telecommunications and Information Administration (NTIA) Acting Administrator Michael Gallagher says his agency's complete Phase 2 broadband over power line (BPL) study is targeted for release later this year. In remarks May 17 at the United Telecom Council's "Telecom 2004," Gallagher hinted at some findings in the Phase 2 study, which NTIA says will provide "additional guidance" on contending with BPL interference. The NTIA advised against putting the present FCC rule making proceeding on hold until release of its full Phase 2 report, however.

"Key Phase 2 technical analyses have been completed," Gallagher told the UTC gathering, "and the findings are appended to NTIA's comments on proposed rules." The NTIA has posted its Phase 1 BPL study on the proceeding, ET Docket 04-37, and has indicated to the FCC that it will file its comments on or about May 28.

Responsible for developing telecommunications policy for a White House that's promoting BPL, as well as for administering federal government radio spectrum that could be affected by the technology, the NTIA finds itself with a stake in both sides of the BPL controversy.

The principal concern, Gallagher acknowledged, is that BPL systems might interfere with federal government and other radio services. The NTIA's Phase 1 study showed that interference risks already are high under existing Part 15 rules. Among its recommendations for reducing interference were frequency shifting and notching as well as "refined compliance measurement procedures."

Gallagher says the NTIA's Phase 2 study has determined that BPL aggregation (i.e., total emissions from multiple BPL systems) and ionospheric propagation "is not a potential near-term problem." The agency predicts that millions of BPL devices can be deployed under the rules the FCC is expected to adopt — probably later this year — before ionospheric propagation and aggregate BPL emissions become an interference issue.

ARRL CEO David Sumner, K1ZZ, says he's curious to hear the NTIA rationalize its "near-term" assertion. "Does this mean it's okay to go ahead with a bad idea if the problems it causes are sufficiently far in the future?" he asked.

The Phase 2 study also will evaluate the effectiveness of proposed Part 15 measurement

techniques and recommend a "height-correction factor" of 5 dB to BPL measurements made at a height of 1 meter, Gallagher said. The NTIA acknowledges that peak field strength is as much as 20 dB higher — a factor of 100 — than the peak measured at a height of 1 meter under current Part 15 rules. Because the peak does not occur consistently at a particular distance from a BPL device along the power line, the NTIA will advise requiring a peak field strength measurement search along the entire power line at a distance of 10 meters and at a height of 1 meter.

The agency has determined that a moderate-to-high probability of interference exists to a fixed station from BPL power lines at a distance of 450 meters — approximately 1480 feet — and to a mobile station at a distance of 55 meters — approximately 180 feet.

To "fulfill special protection requirements," Gallagher said, the NTIA will suggest "minimal" coordination areas — where a specified authority would coordinate all planned BPL deployment — plus excluded bands and exclusion zones. The NTIA recommends "voluntary coordination" with respect to other radio operations plus "mandatory Access BPL power control, frequency agility and shut-off capabilities" to reduce interference risks and to expedite interference mitigation.

The NTIA further proposes that BPL rules provide for "prompt response to complaints of suspected interference," recasting the FCC's Part 15 shutdown requirement as "a last resort."

"Our BPL study of more than 10 million signal samples shows that solutions exist to all identified BPL technical issues," Gallagher concluded.

That's true, Sumner said, "but only if you include shutting a BPL system off and keeping it off as a 'solution.'"

During a White House meeting May 20, ARRL officials asked the Bush administration to heed its own NTIA experts and back away from its support of BPL. The League also has called on the FCC to put its BPL proceeding on hold to allow more thorough research of its interference potential.

For additional information, visit the "Broadband Over Power Line (BPL) and Amateur Radio" http://www.arrl.org/bpl page on the ARRL Web site.



ARRL Propagation Forecast Bulletin

Propagation Forecast Bulletin 23 ARLP023
From Tad Cook, K7RA
Seattle, WA June 4, 2004
To all radio amateurs

The sun appears nearly blank. Today one small spot, sunspot 621 faces earth, but there are no other noticeable areas of activity. Only two days ago there were several more sunspots, but they are no longer visible. These sunspots didn't rotate off the visible disk, but just faded from view.

Sunspot numbers and solar flux are understandably quite low. Average daily sunspot numbers for the May 27 through June 2 period was nearly 40 points lower than the daily average for the previous seven days. Over the same period, average daily solar flux was down almost seven points. Fortunately, geomagnetic activity was low. Over the weekend conditions were unsettled, but otherwise several days had mid-latitude geomagnetic A indices in the single digits.

Over the next week expect low geomagnetic activity. Planetary A index for June 4-8 is expected at 10, 8, 8, 10 and 10. Solar flux values for the same days are predicted to be 90, 95, 95, 100 and 100. Solar flux is expected to peak between June 11-16 around 110.

Now that May is over, we should look at some monthly trends over the last year. The monthly average of daily sunspot numbers for May 2003 through May 2004 was 89.6, 118.4, 132.8, 114.3, 82.6, 118.9, 103, 75.7, 62.3, 75.6, 81, 59.3 and 77. The monthly average of daily solar flux for the same 13 months was 116.6, 129.4, 127.7, 122.1, 112.2, 155.5, 140.8, 116.1, 114.1, 107, 112.1, 101.2 and 99.8. Solar flux hit a new monthly low during May for this downward side of the solar cycle when it dropped below 100.

We're in a late spring propagation mode now. The higher HF bands, such as 10 and 12 meters, are seeing fewer openings, although this month we should see sporadic E skip. As the days grow longer, absorption during daylight hours should

increase. Daytime propagation on 20 meters won't be as good as a few months earlier, but late night propagation should improve. Also during the summer, seasonal noise levels increase, probably more noticeable on 160, 80 and 40 meters. 40 meters should still be good for some long distance nighttime propagation.

Field Day is still several weeks off, but currently the SEC 45 Day AP forecast for planetary A index shows unsettled conditions predicted for June 26 and 27 with A values of 15. This is really too early to tell, but the picture of conditions for that weekend should become clearer as we approach the date.

For more information concerning propagation and an explanation of the numbers used in this bulletin see the ARRL Technical Information Service propagation page at http://www.arrl.org/tis/info/propagation.html.

Sunspot numbers for May 27 through June 2 were 62, 52, 57, 64, 54, 76 and 63 with a mean of 61.1. 10.7 cm flux was 101.8, 102.4, 101.2, 99.6, 95.4, 90 and 90.4, with a mean of 97.3. Estimated planetary A indices were 6, 9, 14, 13, 14, 16 and 11, with a mean of 11.9. Estimated mid-latitude A indices were 5, 6, 12, 11, 11, 14 and 9, with a mean of 9.7.



ARRL DX Bulletin

DX Bulletin 22 ARLD022
From ARRL Headquarters
Newington CT June 3, 2004
To all radio amateurs

This week's bulletin was made possible with information provided by the OPDX Bulletin, The Daily DX, QRZ DX, 425DXnews, DXNL, WA7BNM and Contest Corral from QST. Thanks to all.

EASTER ISLAND, CE0. AC3A will be QRV as CE0/AC3A from June 20 to 24. He will be concentrating on 6 meters if the band cooperates. Scott will also be on HF during his evenings.

SLOVENIA, S5. Amateur Radio operators from Slovenia are celebrating their admission into the European Union. Some S5 operators are now QRV with special prefixes through the end of the year. Look for activity from S5040AAA to S5049ZZZ. Also active is special call S52004EU, during some contests. QSL via the Slovenian QSL bureau.

SOUTH SHETLAND ISLANDS, VP8. Op Oleg, CE9/R1ANF, is currently active from Ardley Bay. QSL via RK1PWA, Nick Shapkin, P.O. Box 73, 164744 Amderma, Arkhangelskaja, Russia.

CRETE, SV9. SV9/SV8DTL will be QRV from June 5 to 15. QSL to SV8DTL via the bureau or via the QRZ.COM address. He plans to appear on 14255, 21255, 28495 and 50115 kHz.

BERMUDA, VP9. VP9/W9AEB, will be active from June 6 to November 6. QSL via WF9V.

LIECHTENSTEIN, HB0. 4Z4DX will operate HB0/M0DOV on June 27 and 28, using RTTY and PSK31 on 12, 17 and 30 meters. QSL via 4Z4DX.

WESTERN SAHARA, S0. DL8YHR will use the callsign S01HA starting in early June. He plans to be active on 6 meters every day. It is unknown what, if any, other bands he plans to be on.

ICELAND, TF. TF/SM6CMU will be on the air from June 3 to 10. He will be active from various points around the island.

CAYMAN ISLANDS, ZF. ZF2BI, operator K4BI, and ZF1DC will be on until June 9, using CW and SSB. They will also be active on 6 meters on 50125 kHz.

DENMARK, OZ. OZ7SM, will be active on Bornholm Island (EU-030) until June 18.

SPECIAL EVENT STATION, G. The special event station GB6DD will be QRV to remember the 60th anniversary of D-Day until June 28.

SPECIAL EVENT STATION, ZX. ZX7AA and ZW7AA will be special Brazilian callsigns from June 11 to 13 from Fortaleza Dos Reis Magos. QSL to PS7KC, bureau or direct, P.O. Box 251, Natal - RN - 59010-970, Brazil.

THIS WEEKEND ON THE RADIO. The QRP TAC Contest, World Wide Major Six Club Contest and

the IARU Region I Field Day, CW, are on tap for this weekend. Please see June QST, page 98 for details.



Is CW a Digital Mode?

By Paul Dunphy, VE1DX

One of the Local QRPers was down in the village the other day, pacing back and forth in the park, with a troubled look on his face and sweat on his brow. After about fifteen minutes of this he started up the hill, working his way closer as he kept pacing. He finally made it to the veranda. We had the feeling he wanted advice, but was afraid to ask. So, against our better judgment, we asked the QRPer what was troubling him. "Oh", he replied slowly, "I'm just thinking about how I can forget CW."

Usually there isn't a lot a QRPer can say that leaves us speechless, but this one did! We had heard a lot of strange theories and creative interpretations of the Eternal Enigmas of DXing from the Local QRPers, but this was something we hadn't expected. We just looked at the QRPer as he ploughed on.

"I can't get it out of my head!" he continued, stopping and looking us right in the eye, "I catch myself looking at road signs, books or anything else that contains text and unconsciously translating it to dits and dahs. When I turn on the rig, I automatically spin the dial to the lower band edge. I can't leave it alone. How am I going to forget it if I can't stay away from it? Pretty soon I won't be a True Blue DXer at all!"

We regained our composure and looked at the QRPer intently. "Aren't those the very techniques you used ten years ago to learn the code? And didn't you spend endless hours getting your speed up to where you could operate with the best of them? Why would you want to undo all that hard work? Aren't you a good CW operator?"

"Yes! Right on all counts. I listened to you! I listened to all the Big Guns and the ARRL. I worked and worked at it until I could send and receive 25-30 WPM. And now I'm cursed with it. I can't get it out of my head!"

"Why would you want to?" we asked, incredulously. In all our years as a DXer, we'd heard the opposite argument thousands of times... but we'd never heard anything like this before. "Why? Why, you ask! So I can become a true blue modern DXer! The new operators, the ones with the FT-1000's and full bore amplifiers who've been Extras for three or four months are telling me CW QSOs are not real DX! Most of them say unless you hear the other person's voice, it isn't a good contact! They claim I'm stuck in the last millennium, and that a bunch of dots and dashes don't count."

"That's ridiculous!" we roared, jumping to our feet. "Why are you listening to that foolishness? Is there anything in the DXCC rules that has changed regarding CW contacts? CW contacts are just as good as phone! Maybe even a heck of a lot better!"

"Not according to the new guys. They said a real contact has to be made on phone. I said the ARRL and the DXCC desk don't specify anything like that! They laughed at me, and said I should get with the new wave of operators and stop listening to the old has-beens. They said the FCC was moving to do away with CW altogether, and within a few years it'll be just a memory, like spark transmissions."

He looked at us with a worried face and continued, "So if I don't concentrate on SSB, and learn how to become better at busting pileups who are listening 200-220, I won't be able to compete with these new generation of True Blue DXers. I have to learn how to get on DX lists, and all the tricks involved in making sure the Net Controller hears my last two. I can't split my attention between CW and phone and remain competitive. I have to forget the code!" He was sweating and his beady little eyes were glaring right at us. "Being a good CW operator has become a curse!"

"You are overreacting," we said, sitting back down. "CW will never die." The QRPer was not convinced. "I told them that, and they said maybe not, but only computer sent and received code should be allowed. They said that CW is like PSK-31, whatever that is. They said hand sent code could never be as perfect as code sent by a computer, and that a real 21st century DXer will use computer technology to send everything. Why, they even claim that SSB isn't real unless it's DSP processed on send and receive!"

"Don't be so silly" we replied. "CW will always be around, and no computer can decode it better than the human ear. Besides, it isn't a digital mode."

"But they say it is! The new DXers say they can send and receive 50-60 WPM with their TNCs the same as RTTY, Packet and ASCII, and that the dits and dahs are the same as ones and zeros. They say it's a digital mode. These guys all have 1.3 and 1.5 GHz CPUs in their computers too! They keep claiming to be the wave of the future, and say we better listen to them."

"Who cares what they say? The ARRL will protect the interests of us traditional DXers and real CW types. Why do you think they have Straight Key Night? Don't let a few newcomers with fast computers tell you the DXCC program is going digital, or that you have to forget CW! They are just pulling your leg. It sounds like they are new members of the Legion of Hand Wringers."

The QRPer drew himself up to his full five foot five and a half inches tall and looked directly in the eye. "That's exactly what I told them. And do you know what they said? They asked me one simple question. 'Who's paying the bills?' At first I didn't follow them. And then it hit me! All the Old Timers are either life members in the ARRL or have dropped out because of the increased fees of the DXCC program. The new kids with their fast computers are the only ones joining the ARRL. They are generating the new revenue. And it follows they will call the shots! So whatever you and I might have learned and believed years ago has all changed. If the dues paying members say SSB only, or that CW is a computerized digital mode, we better listen! And you better forget your code too!"

Son of a Gun! We sputtered for an answer, but there was none forthcoming. Usually when a QRPer goes of on a ridiculous tangent, we can see the mistake. This time, we couldn't see a flaw in his reasoning. We scratched our head as he walked down the hill and thought about what he had said. The more we thought about it, the more our brain muscles ached.

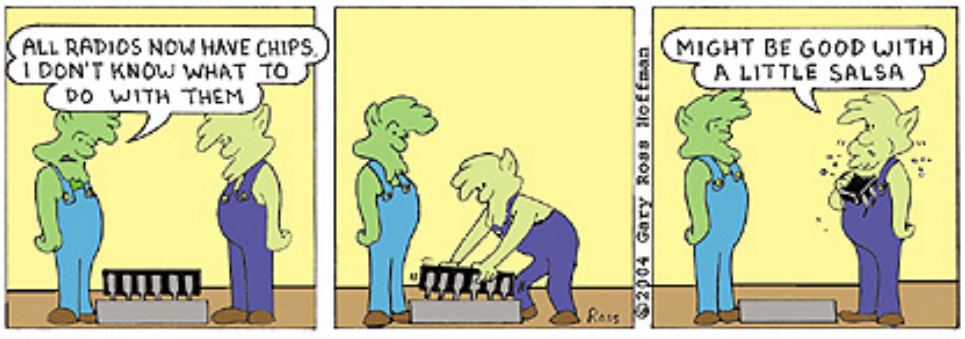
Finally we shrugged and started off toward Palos Verdes country. By everyone's measure, this cycle hadn't met expectations. There was DX, but the bands were not as hot as they were during the Golden Days of DXing of past cycles. We decided that even if the QRPer and his computers friend were right, we still needed propagation. Maybe the leader of the Palos Verdes Sundancers could explain things. DX IS! Even if it has to be digital. Remember what Lord Baden Powell, the Hero of Mafeking so often advised: "Be prepared!" Even if it means buying a 1.3 GHz Pentium IV to work CW for you ...

Helpful Hints

Save the cost of installing cable TV by taping current editions of sitcoms and then watching them again in fifteen years.

Shallow Thoughts

If a book about failures does not sell, is it a success?



Carbon Amateur Radio Club – 2003-2004 Officers

President: Anthony "Goody" Good, K3NG, goody@fast.net
Vice President: Rob Roomberg, KB3BYT, roomberg@ptd.net
Secretary: Darryl Gibson, N2DIY, n2diy@losch.net
Treasurer: John Schreibmaier, W3MF, w3mf@ptd.net
W3HA Callsign Trustee: John Bednar, K3CT, k3ct@fast.net
W3HA Repeater Trustee: John Bednar, K3CT, k3ct@fast.net
Public Information Officer: Lisa Kelley, ldkelley@voicenet.com

Directors

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Bob Culp, KB3IDV
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ARES/RACES Committee

Bruce Fritz, KB3DZN (DC), bruce56@ptd.net
Darryl Gibson, N2DIY, n2diy@losch.net
Todd Deem, KB3IKX, kb3ikx@localnet.com

Services

W3HA Repeater: 147.255 MHz + PL 131.8

CARC Website: http:/www.learnmorsecode.com/carc/
Webmaster: Rob, KB3BYT roomberg@ptd.net

CARC Email Reflector: see www.qth.net CarbonARC list for details

Emergency Power Equipment Trustees: Lisa and Bill Kelley, KA3UKL, ldkelley@voicenet.com

CARC Membership Information

Regular Membership is $15.00, which includes autopatch privileges.

All amateur radio operators are invited to join the CARC ARES / RACES net held 21:00 local time every Wednesday on the W3HA repeater at 147.255 MHz + offset, PL 131.8. Any amateur radio operator or anyone with an interest in ham radio is welcome to attend our monthly meetings which occur the third Thursday of each month at 7:30 PM at the Carbon County EMA Center on Route 93 in Nesquehoning.

Carbon Amateur Radio Club
c/o Bob Schreibmaier K3PH
P. O. Box 166
Kresgeville, PA 18333-0166