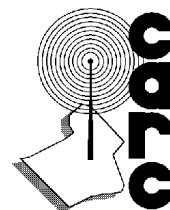




The Illuminator



The monthly newsletter of the Carbon Amateur Radio Club

December 2003

December Meeting

The next regular meeting of the Carbon Amateur Radio Club will be held on Thursday, December 18, at 7:30 p.m. at the EMA Center in Nesquehoning. See you there!



Treasurer's Report

By John, W3MF

As of November 20, 2003:

Previous Balance	647.06
Receipts (Edgemont Lodge)	100.00
Subtotal	747.06
Disbursements (newsletter)	5.55
Final Total	741.51



ARRL's BPL Study Imminent; League to Solicit BPL Trial Interference Reports

(From the ARRL Letter)

An ARRL-sponsored independent engineering study to accurately quantify the interference potential of Broadband over Power Line (BPL) is set to start in the very near future. In addition, the League soon will elicit interference reports from amateurs in communities where BPL trials are known to be under way.

"We're contracting for an independent measurement of potential interaction between BPL and Amateur Radio," said ARRL CEO David Sumner, K1ZZ. The study — to be conducted under the auspices of certified professional engineers — not only will examine and document how BPL might affect HF and low-VHF amateur

operation but how Amateur Radio operation could affect BPL systems.

The ARRL-sponsored engineering study should be completed within a couple of months, Sumner said. The ARRL anticipates that the FCC could issue a Notice of Proposed Rule Making in the proceeding (ET Docket 02-104) early in 2004. The FCC's Notice of Inquiry in the matter, released last April, has attracted more than 5100 comments — many of them from the amateur community.

At this point, while some BPL system trials are operating under existing Part 15 rules for unlicensed devices, other systems have secured FCC Part 5 experimental licenses that permit them to use higher power levels. In either case, however, FCC rules require BPL operators to cease operation if their systems result in harmful interference.

In a related initiative, the ARRL will be contacting amateurs in about a half-dozen US communities where BPL field trials now are in progress. The League will ask amateurs to listen on the air for any increase in noise level that might be related to the BPL trial. Sumner says it's most important that hams in trial areas who detect noise first verify that it is indeed caused by BPL before they document and report their observations to the FCC.

"It is important that each interference complaint be a valid case of actual harmful interference," an attachment to Sumner's letter says. "It is possible to misidentify other noise sources as BPL." Sumner says amateurs must carefully avoid "crying wolf" by filing invalid reports of BPL interference. The League suggests amateurs receiving the solicitation letters enlist the support of "a technically qualified observer" — an ARRL Technical Coordinator, Technical Specialist or local club interference committee — then submit a recording of the interference to the ARRL Laboratory for review and analysis.

The ARRL's solicitation includes a form to document suspected instances of harmful interference from BPL. Sumner says the League hopes the effort will result in a "body of technical evidence that will protect the Amateur Service from this source of potential interference."

In a related development, a California technology company this month wrote the FCC's Office of Engineering and Technology to refute ARRL assertions that BPL necessarily poses a severe interference potential. Corridor Systems <http://www.corridor.biz> says its "breakthrough" BPL system, operated under existing Part 15 rules, uses frequencies in the 2 to 20 GHz range, will not interfere with HF and low-VHF reception and can provide up to 216 MB per second throughput.

"Corridor Systems has demonstrated a BPL technology which is completely compatible with the Amateur Radio Service and, indeed, with all users of the HF-VHF spectrum," Corridor's Chief Technology Officer Glenn Elmore, N6GN, said in the "open letter" <http://www.corridor.biz/031201-fcc-letter.pdf> that was copied to ARRL.

Sumner pointed out in responding to Elmore that ARRL only first became aware of Corridor's work in mid-October and that the League's comments were appropriate within the context of the FCC's definition of BPL systems operating in the 2 to 80 MHz HF and low-VHF spectrum. "The Corridor Systems approach deserves to be distinguished from the spectrum-polluting HF and low VHF systems, not only because of its much lower interference potential but also because of the higher data rates it can support," Sumner said.

Additional information about BPL and Amateur Radio is on the ARRL Web site <http://www.arrl.org/tis/info/HTML/plc/>.



Logbook of the World Continues to Grow (From the ARRL Letter)

The ARRL's Logbook of the World secure contact-verification database continues to grow. So far, reports ARRL Membership Services Manager Wayne Mills, N7NG, nearly 5000 users have

uploaded logs containing some 25.4 million Amateur Radio contacts. This has resulted in more than 1 million QSL records.

"The key is participation, and it doesn't cost a thing to get the software and upload logs," Mills pointed out. "We're encouraging all hams to participate in Logbook, whether the ham is a casual operator, contester, ragchewer or DXer." To further expand the database and generate more confirmed contacts for all LoTW users, Mills is calling on everyone to sign aboard and submit as many logs as possible.

Once LoTW programming is complete, users will be able to redeem credits for ARRL awards without having to go through the expense and trouble of obtaining hard-copy QSL cards. Mills emphasizes that LoTW is not meant to replace paper QSL cards but supplements traditional QSLing.

Signing up as a new LoTW user is simple. Visit the Logbook of The World Web site <http://www.arrl.org/lotw> and read the "Getting Started" document, Mills said. He advises new users to print it out to have the instructions handy.

The "Getting Started" page offers step-by-step instructions for getting a secure digital certificate from ARRL and preparing and uploading logs. Mills noted that most new user problems result from failing to specifically follow the instructions outlined on the "Getting Started" page.

Amateur Radio software developers are starting to include direct support for Logbook of The World in their programs. Most logging software allow users to export a log in ADIF format, which LoTW will accept. A few programs incorporate the ARRL's TQSL file-generation and digital certificate code, which simplifies the process of digitally signing logs and exporting them in a separate e-mail.

For more information, visit the Logbook of The World Web site <http://www.arrl.org/lotw>.



FCC Reorganizes Wireless Telecommunications Bureau (From the ARRL Letter)

3 *The Illuminator*

The FCC has announced a reorganization of its Wireless Telecommunications Bureau (WTB) <http://wireless.fcc.gov/> "to more effectively support the FCC's strategic goals — broadband, competition, spectrum, media, homeland security and modernizing the FCC." The WTB administers the Amateur Radio Service (Part 97) and amateur licensing, but the changes are expected to be transparent to the amateur community. The Amateur Service now will be administered by the newly named Public Safety and Critical Infrastructure Division. D'wana Terry, formerly chief of the Public Safety and Private Wireless Division, will head the new division.

"The bureau's portfolios have been redistributed along the lines of strategic goals, consolidating similar functions to focus resources better," the FCC said in a November 24 public notice. As a result of the reorganization, which the FCC approved November 13, WTB expands from five to six divisions: Public Safety and Critical Infrastructure, Spectrum Management Resources and Technologies, Auctions and Spectrum Access, Spectrum and Competition Policy, Mobility, and Broadband.

In addition to the Amateur Service, the Public Safety and Critical Infrastructure Division will oversee Part 95, Marine, Aviation, Intelligent Transportation Systems, Public Safety Fixed Microwave, Public Safety and Private Land Mobile services and E911, among other areas. Responsibilities moved elsewhere include Fixed Microwave (Part 101), Instructional Television Fixed Service, the Multipoint Distribution Service, and the Multichannel Video Distribution and Data Service.

The action reduces the scope and size of WTB's larger divisions and eliminates separate branches below the division level, while retaining their current functions. One of those was the Licensing and Technical Analysis Branch, headquartered in the FCC's Gettysburg, Pennsylvania, office. Among other tasks, that branch has handled the granting and issuance of Amateur Radio licenses and the vanity call sign program. Another was the Policy and Rules Branch at FCC Headquarters, which has been the home of Bill Cross, W3TN, an FCC figure well-known within the amateur community. Among other tasks, that branch has handled Amateur Radio rule making petitions and Part 97 rules interpretations.

A potential plus of the new arrangement is that Cross now will work under another amateur licensee, Mike Wilhelm, WS6BR, who will report to Terry.

The FCC said eliminating branches would promote greater management flexibility in deploying resources and lead to a flatter, more flexible organization without altering the bureau's overall mission. The Commission said it was able to carry out the reorganization by redeploying existing positions.

WTB Chief John Muleta said the reorganization will result in "a mission-driven team that will be innovative in its approach to regulatory policies and customer service."



Australia Will Drop Morse Requirement January 1

(From the ARRL Letter)

Australia is the latest country to announce it's dropping Morse code testing as a licensing requirement. The Australian Communications Authority (ACA) <http://www.aca.gov.au/> says it will eliminate the Morse testing requirement starting January 1.

"This decision was made considering public comments at the meetings and initial analysis of submissions to the discussion paper," the ACA said, adding that it would make interim changes to its rules to allow immediate access to privileges previously available only to those satisfying the Morse proficiency requirements. The change will give holders of Intermediate and Limited Amateur licenses access to the same frequency bands as Unrestricted Amateur licensees, and holders of the Novice Limited Amateur license access to the same frequency bands as Novice licensees.

The Wireless Association of Australia <http://www.wia.org.au> says dropping the Morse requirement will mean no changes in existing licenses or call signs. WIA President Ernie Hocking, VK1LK, urged hams in Australia who don't yet enjoy HF privileges not to get on the air ahead of schedule. There's more information on

4 *The Illuminator*

the ACA Web site <http://www.aca.gov.au/> (Click on "Review of Amateur Service Regulation.")

Ireland, Switzerland, Belgium, the UK, Germany, Norway, the Netherlands, Austria, New Zealand, Luxembourg, Singapore and Papua-New Guinea have already dropped their Amateur Radio Morse testing requirements or have announced an intention to do so.

Radio Amateurs of Canada asked Industry Canada to drop the Morse requirement at the 21st Industry Canada-Radio Amateurs of Canada Amateur Radio Advisory Board meeting October 23 in Ottawa. US amateurs have commented on 14 petitions calling for outright deletion of the Morse requirement or changes in existing requirements. The FCC is not expected to act on the matter until 2004 at the earliest.



ARRL Propagation Forecast Bulletin

Propagation Forecast Bulletin 50 ARLP050
From Tad Cook, K7RA
Seattle, WA December 5, 2003
To all radio amateurs

Geomagnetic conditions have been quite stable this week, and as a result, HF propagation has been good. Right now the earth is entering a solar wind stream, which could trigger auroras. The interplanetary magnetic field is currently pointing south, which means earth is vulnerable to the effects of solar wind.

The current forecast is for geomagnetic indices to rise over the next few days. The predicted planetary A index for Friday through Monday, December 5-8 is 20, 35, 25 and 20. Predicted solar flux for those same days is 115, 110, 105 and 105. Solar flux values are predicted to run between 105 and 110 and then reach a slightly lower minimum around December 12, then rise again toward a short-term peak around December 18-22.

Petr Kolman, OK6MGW is predicting active geomagnetic conditions for December 10-11, unsettled to active on December 5 and 9, unsettled conditions on December 6 and quiet to unsettled conditions on December 7-8.

Conditions this weekend during the ARRL 160-Meter CW contest will be affected by any geomagnetic disturbance. Check WWV at 18 minute after the hour (or check the WWV text at <http://sec.noaa.gov/ftpd/ir/latest/www.txt>) at 0018, 0318, 0618, 0918, 1218, 1518, 1818, and 2118z for the latest mid-latitude K index.

If the value is 3 or less, conditions should be good. Right now conditions don't look very promising, with the mid-latitude K index at 0600z on Friday, December 5 at 5. WWV is reporting an A index of 6, but that is really based on all the K indices for December 4. Otherwise, that would be quite good.

As an example of how different these values are, if the K value of 5 were measured during an entire UTC day, the resulting A index for that day would be 48. An A index of only 6 indicates K indices for the day between 1 and 2.

Diane Leveque, NH6HE sent in a news item from NASA this week concerning openings in the earth's magnetic field detected by NASA's IMAGE (Imager for Magnetopause-to-Aurora Global Exploration) satellite. You can read the story on the NASA.GOV web site at http://www.nasa.gov/vision/universe/solarsystem/image_ssui.html or at the SCIENCE.NASA.GOV web site at http://www.science.nasa.gov/headlines/y2003/03dec_magneticcracks.htm?list609156.

This story is of interest to amateur radio operators because openings in the magnetic field allow solar wind to pass through, affecting earth. The IMAGE satellite is the first spacecraft dedicated to imaging the earth's magnetosphere, and NASA has a fascinating web page for IMAGE at <http://image.gsfc.nasa.gov>.

David Moore also sent an article from SpaceRef.com on outbursts of gas from the sun, which is at, <http://www.spaceref.com/news/viewpr.html?pid=13071>.

And finally, Stephane Burgoyne, VE2OWL of Drummondville, Quebec sent in a truly wonderful link recently at <http://www.spaceweather.gc.ca>, which provides a unique view and forecast of geomagnetic conditions in northern latitudes.

5 The Illuminator

Stephane's own web site is at,
<http://www3.sympatico.ca/stephane.burgoyne>, in French.

For more information about propagation and an explanation of the numbers used in this bulletin see the Propagation page on the ARRL Web site at <http://www.arrl.org/tis/info/propagation.html>.

Sunspot numbers for November 27 through December 3 were 154, 185, 177, 178, 159, 119 and 100 with a mean of 153.1. 10.7 cm flux was 174.7, 167.7, 165.9, 152.8, 143.3, 139.3 and 123.8, with a mean of 152.5. Estimated planetary A indices were 10, 10, 9, 10, 10, 9 and 7, with a mean of 9.3

Other DX News

(From the ARRL Letter)

Turtles vexing TO4E DXpedition: The Daily DX <http://www.dailydx.com> reports the Europa Island DXpedition team was "a bit tired" after taking part in the CQ World Wide DX Contest (CW) the weekend of November 29-30. Operating as TO4WW for the contest, the crew put some 5 million points (and 4000 QSOs) in the log. DXpedition Co-organizer Rafik Djandji, F5CQ, reports that protected sea turtles have been a nuisance for the TO4E operation. Lowband antennas are installed on the beach, and each night, the turtles knock them over and destroy the radials on their way from the ocean to the top of the beach to rest during the night. This means the team then must repair and reinstall the antenna systems on a daily basis. The Clipperton DX Club is sponsoring the Europa operation. There's more information on the Europa 2003 DXpedition Web site <http://europa2003.free.fr/>.

Ed Giorgadze, 4L4FN, now active from Angola: Ed Giorgadze, 4L4FN — who made ham radio history with his P5/4L4FN operation from North Korea now is active from Angola as D2PFN on RTTY and SSB. QSL manager for D2PFN and P5/4L4FN is Bruce Paige, KK5DO. More information and an on-line log will be available on Paige's Web site <http://www.amsatnet.com> (click on D2 Angola).

CQ Worldwide CW Score Rumors

	QSOs	Zones	Countries	Score
K3II (multi-multi)	2514	154	532	4,910,388
K3PH (single op assisted)	1884	141	496	3,400,306
K3CT (very part time)	363	82	206	~282,000

ARRL DX Bulletin

DX Bulletin 49 ARLD049
From ARRL Headquarters
Newington CT December 4, 2003
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.

MAURITANIA, 5T. A group of Japanese amateurs are QRV as 5T5AFF, 5T5GDR, 5T5RQ, 5T5CPS, 5T5HC and 5T5TY until December 17. QSL to home calls.

AUSTRAL ISLANDS, FO. After his Marquesas Islands activity, Vlad, UA4WHX will be QRV as FO/AC4LN from Rurutu Island, IOTA OC-050, from December 10 to 12. QSL to home call.

MARQUESAS ISLANDS, FO. Vlad, UA4WHX will be QRV as FO/AC4LN from Atuona Island, IOTA OC-027, from December 6 to 9. QSL to home call.

THAILAND, HS. Mirek, VK6DXI is in Pattaya on business until December 23 and will operate in his spare time as HS0/VK3DXI. Activity is on 80 to 10 meters. QSL via DL4DBR.

DJIBOUTI, J2. Baldur, DJ6SI is QRV as J20DA and has been active on 20 meters around 1530z, 30 meters around 1600z and 40 meters around 1930z. His length of stay is unknown. QSL to home call.

ST. VINCENT, J8. Wayne, K8LEE and Peter, N0FW are QRV as J6DX until December 16. This includes entries in the ARRL 160 and 10 meter contests. Outside the contests, activity is on 160 to 6 meters. QSL via W8QID.

JAPAN, JA. Osamu, JR1EEU is QRV from Aoga shima Island, IOTA AS-043, until March 2004. Activity is on all HF bands. QSL direct.

JORDAN, JY. JY8YB has been QRV using RTTY on 20 meters between 0930 and 1130z. QSL direct.

ST. PETER AND ST. PAUL ROCKS, PY0S. Joca, PS7JN is QRV as ZW0S until December 15. Activity is on all HF bands, including 6 meters, using SSB and RTTY. Since this is a work-related trip, activity will be limited, typically after 1900z. QSL to home call.

CHAD, TT. Allen, N5XZ is QRV as TT8XZ, and will be here until December 19. QSL to home call.

ST. KITTS AND NEVIS, V4. Larry, KJ4UY is QRV as V47UY until December 16. This includes entries in the TARA RTTY Melee, PSK Death March and possibly the ARRL 160 Meter contests. Although this is a vacation, he will try to be active as much as possible. QSL to home call.

COCOS-KEELING ISLAND, VK9C. VK9CJ has been QRV on 20 meters around 1200z. QSL via JA1KJW.

CAMBODIA, XU. Dick, N6FF is QRV as XU7ACB for about two weeks. Activity is mostly on 160 meters, but will try other bands, depending on propagation. QSL to home call.

UK SOVEREIGN BASE AREAS ON CYPRUS, ZC4. Geoff, ZC4CW is QRV as ZC4T and will participate in the ARRL 160 and 10 Meter contests. QSL via G3AB.

CAYMAN ISLANDS, ZF. Joe, W6VNR will be QRV as ZF2AH in the ARRL 160 Meter contest. QSL via N3ME.



It Sounds Like Fun

By Paul Dunphy, VE1DX

QRZ, QRZ came the cry from the speaker
Quick, tune up before they get weaker
Where are they listening? Where?
There they are! Thanks to Shakespeare!

The bands were a bit flat last week, and we were taking a day off DXing. We'd heard that the Palos Verdes Sundancers had lost a bit of their enthusiasm in the last few months, and the flux was dropping as a result. This happened a number of times before, usually following an 11-year pattern. As soon as the Sundancers could be coaxed back into action, the flux shot back up again. Some of the more scientifically knowledgeable QRPers argued this was nonsense, and that the flux was a direct result of solar activity. We had found the easiest way to counteract this was to ask which came first. And if the QRPer was especially persistent, we'd refer him to Sunspot Louie, and his cousin Red-Eyed Louie. No one knew propagation and DX activity better, and this usually put an end to the end of the argument.

We were contemplating all this on the veranda when one of the more senior QRPers came around the turn and beat his way up the hill. He was still in good shape in spite of his advancing years, and hardly broke a sweat as he stomped up the steps and sat down beside us. He glared at us with his beady little eyes and started right in, "Why do DXers go on DXpeditions?" he demanded. We looked back at him for a moment. We'd never really thought about it.

After a bit of thought we replied, "Because they want to." It seemed the obvious answer. "No!" the QRPer said, pointing at us with his finger, "No, not at all. That's what I used to think, but a few of the fellows at the DX club set me straight. They go because they want to hand out a new one to the Deserving! They go because they are tough, and because they can handle the heat or cold, or whatever else they might have to put up with.

Some of these remote locations have snakes and spiders and all kinds of things like that too! How would you like to be camped out in a jungle in Burma or some place like that? They don't like it. They go so they can give us a new one for DXCC!"

"Are you sure?" we asked, staring right back at him. "Of course I am," he retorted, now jabbing his finger back and forth directly at us. "It's easy for you to say they like it, but think of all the money they have to spend, and of all the planning and risks they take! And if that isn't enough, once they get on the air, everyone is screaming and working them three or four times on the same band. If they show up on 20, someone will ask them to go to 15. And if they show up on phone, someone will demand they switch to CW or teletype or satellite. This goes on for days, and once they finally get the pileups worked down, another bunch are complaining about the on-line logs. And even before they get back, still other ones are whining about not having their QSLs yet! These fellows are heroes, the top echelon of DXers, and they are there to give us new ones!"

We decided the finger pointing was effective, so we tried it ourselves, only this time we wiggled our pointing finger from side to side as we spoke, "If it is so terrible, and requires so much money, and if they have to put up with all this abuse, why do they go? Just to hand out a new one? No. They go because they like it." We looked at the QRPer with a slight smile as we said this. It was a mistake. He jumped to his feet and bellowed, "No they don't like it! They hate it. They go because they want to help us with our DXCC totals, but they don't like it one bit. Anyone in their right mind can understand this! You work every group that goes anywhere new, just like the rest of us. They are there to help us! Why are you so ungrateful?"

Son of a Gun! What could we say to a QRPer who'd missed seeing the elephant? Sometimes it is better not to argue, but we tried one more time. "Look at it this way. These fellows you say who go to all these horrible locations, and hate every minute of it . . . why do they usually find another spot that's just as bad or maybe even worse, and go back again if they don't like it?"

The QRPer jumped to his feet and drew himself up to his full five and a half feet and glared at us. "They go because they are heroes! They go

because they are tough! They go so we can work them, and make Honor Roll. But listen, buster, they sure as heck don't like it! There is no sense talking to you!" And with that he stomped down the steps and down the hill, arms swinging and glancing back at us in contempt. We scratched our head, for we really weren't sure what had just happened. We finally decided the QRPer hadn't told us the whole story. We'd found in the past that some of the Local QRPers usually had a hidden agenda when they were so adamant and indignant. When a QRPer like this gets so worked up, as the Old Timer had often told us, "Leave them alone. They will figure it out sooner or later. And for some, it will be a lot later. A few will never get it. DX wisdom is not always measured in years, or even in terms of on air experience."

As we watched the QRPer disappear around the bend, we decided this must be the case. Either he'd understand or he wouldn't. We stood up, shrugged and walked back into the shack. The latest WWV numbers had just flashed across the cluster screen and the flux was inching up. Maybe the Palos Verdes Sundancers had a change of heart and were back at it. We flipped on the rig and began tuning 20. As Lord Baden-Powell, the Hero of Mafeking so often advised, "Be prepared!" And we were. Maybe we'd find a bunch of DXers camped out on some obscure rock, handing out rapid fire QSOs to the Deserving and despising every moment of it. Then again, maybe they might be having fun! DX IS!



Helpful Hints

Fool other drivers into thinking you have an expensive car phone by holding an old TV or video remote control up to your ear and occasionally swerving across the road and onto the curb.



Shallow Thoughts

If you pull the wings off a fly, does it become a walk?

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

John Bednar, K3CT, k3ct@fast.net
Bob Culp, KB3IDV
Bill, KA3UKL, ldkelley@voicenet.com

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