The Illuminator

The monthly newsletter of the Carbon Amateur Radio Club

December 2004

December Meeting

The next regular meeting of the Carbon Amateur Radio Club will be on Thursday, December 16, at 7:30 p.m. at the Emergency Operations Center in Nesquehoning. Our program for the evening will be an update on BPL by our own Goody, K3NG.

See you at the meeting!

Carbon Amateur Radio Club Regular Meeting Minutes November 18, 2004

President Anthony “Goody” Good, K3NG, called the regular monthly meeting to order at 7:48 PM on Thursday, November 18, 2004 at the Emergency Operations Center in Nesquehoning. 15 people were in attendance.

Goody, K3NG, read the treasurer's report in John, W3MF's, absence. The report is as follows:

Previous Balance	$835.90
Receipts (dues)	$20.00
Sub-total	$855.90
Disbursements (newsletters)	$5.92
Final Total	$849.58

Motion made to approve the treasurer's report as read; 2nd and approved by members in attendance.

Brian, KB3KLJ, read the October 21, 2004 meeting minutes. Motion made, seconded, and approved to accept the meeting minutes as read by Brian, KB3KLJ.

By-law Changes

Goody, K3NG, discussed the proposed by-law changes and the club's voting requirements. The BOD discussed the voting language, and interpreted the by-laws as two thirds of voting members PRESENT at the meeting would be needed to accept the proposed changes.

Goody, K3NG, read the proposed by-law changes that were previously mailed to the membership as a review of what the club would be voting on.

Bruce, KB3DCM, raised a question on voting requirements of the membership with possibly adding a requirement for attendance of members to be able to vote.

A motion was made for an open vote on the by-law changes as previously distributed. 2nd and approved (for having an open vote).

Open vote taken by members signifying “aye.” The by-law changes were passed unanimously.

Comments from the floor were made regarding if there has been sufficient notice of a vote to be taken, those not present can be viewed as simply declining to vote. No specific action taken on this at present.

Old Business

Anne, KO3M, reported on information obtained from Prints 4-U on Indian Hill. They gave a price $25/pair for magnetic signs. These signs are slightly smaller than the ones previously presented by Eric, N3TVV. Anne, KO3M, will send an email with details to Goody, K3NG, for redistribution.

Rob, KB3BYT, called for a show of hands for who would be interesting in the signs at $25/pair. Nearly all hands raised.

Bob, WB3W, indicated that he has submitted W3HA's PAQSO party logs.

New Business

Open Positions:

Goody, K3NG, noted that there are three open club positions open:

- Repeater Trustee
- Associate Repeater Trustee
- EMCOMM Coordinator

Goody, K3NG, noted that Bruce, KB3DCM, is currently serving as EMCOMM Coordinator, and Bob, WB3W, as Interim Repeater Trustee.

Motion made to appoint Goody, K3NG, as Associate Repeater Trustee. Motion was 2nd, passed.

Bruce is already the ARRL EC for our area, and will continue to serve as EMCOMM Coordinator.

Bob, WB3W, will continue as Interim Repeater Trustee.

Meeting Programs:

Goody, K3NG, will be giving a BPL update in December; in January, we will do a QRP/Homebrew program with everyone bringing their stuff for show and tell.

Goody, K3NG, asked for other program ideas.

Lamar, N3AT, discussed having CW project boards for using on an HT. This would be useful for people interested in code practice. Lamar, N3AT, has the photo etching transparency for this project.

Rob, KB3BYT, indicated that he was familiar with the EPARA stuff that Lamar, N3AT, is discussing and said that this was made to work with a straight key, but he would prefer to use paddles. Rob will contact Michael Bouchard, N3BUB, (the guy responsible) to discuss mods for paddles.

Anne, KO3M, asked if 147.045 is the EPARA repeater with a response from a number of members that it is. Anne, KO3M, noted that EPARA's Friday night net is at 7PM (called technet), and they have a Tuesday night regular net. They offer code practice.

Further discussion ensued from the members regarding doing CW on our repeater. WB3W said we can make this work and it will be tried.

Lamar, N3AT, will pass the CW materials on to Rob, KB3BYT.

SKYWARN:

Rob, KB3BYT, mentioned that Bill Byron, N3VAE, would like to have a Saturday program to do a SKYWARN certification program in spring; conducting the program was requested by Mt. Holly.

Rob, KB3BYT, indicated that Bill, N3VAE, requested to do a SKYWARN presentation at one of the upcoming meetings, we need to tell him when. Goody, K3NG, said we should request him for the February meeting.

By-law Review:

Darryl, N2DIY, made a motion for the BOD to review the by-laws and find any ambiguity about voting procedures, and where there are any, to revise to clearly state it is 2/3 of the voting members PRESENT. 2nd and passed.

ARES/RACES:

Bruce, KB3DCM, indicated that John Holm, WX3W resigned as section manager. Chris Snyder, N3GF has become the new EPA section manager.

Bob, WB3W, asked about RACES: required to preregister. Lehigh County wants everyone to register, and they are issuing photo ids for those who register.

Todd, KB3IKX, noted that this is to be done in Carbon County for all fire and police personnel, and he believes it will eventually get down to "us."

Anne, motion to adjourn; 2nd, passed

Meeting ended at 20:36.



FCC Reminds Licensee That All Amateur Frequencies Are Shared

(From the ARRL Letter)

FCC Special Counsel for Enforcement Riley Hollingsworth has reminded a New Jersey radio amateur that all frequencies in the Amateur Service are shared. Hollingsworth included the advice in a Warning Notice to Irwin L. Richardt, W2VJZ, in response to complaints from other 75-meter AM operators. Hollingsworth in July asked Richardt to respond to a complaint alleging, among other things, that Richardt would not relinquish the "AM

window" (3885 kHz) or let others use the frequency unless he was included in the conversation. Hollingsworth called Richardt's response to the complaint "unacceptable."

"We have reviewed your response as well as tape recordings submitted with the complaint," Hollingsworth said in the October 22 Warning Notice. He told Richardt that it was "absolutely irrelevant" under the Amateur Service rules how long he had been licensed or how many hours a day he spent monitoring or using the frequency.

"None of that makes a frequency 'your frequency,'" Hollingsworth said, adding that all amateur licensees have the same rights to any given frequency as Richardt does.

The primary complainant has alleged that Richardt exhibits "eccentric" and "offensive" behavior on the air, occasionally leaving his AM transmitter keyed while he does other tasks around his house. Another radio amateur said W2VJZ continues to attempt to contact him even though he's made it clear he doesn't wish to speak with Richardt.

Referring to his ham station as "my electronic printing press," Richardt asserted in his July 28 response to the FCC that he's been "a victim of vicious radio jamming for well over one quarter of a century." He also claimed to have once discovered a "jamming transmitter" hidden in nearby woods. In addition, Richardt accused another station of transmitting "filthy lies and language" when he (Richardt) was in QSO with his friends in July.

Hollingsworth said if incidents "such as those outlined in the complaint" recur, the FCC will initiate enforcement actions that could include fines, license revocation or both.

ARRL Participating in IEEE, Industry Effort to Set BPL Standards

(From the ARRL Letter)

Working with industry through the IEEE Broadband over Power Line (BPL) Study Group http://grouper.ieee.org/groups/bpl and in other venues, the ARRL is taking part in efforts aimed at defining and establishing key BPL technical standards. Among other issues, these standards will address the avoidance of interference from BPL to licensed radio services. The study group has held three meetings this year, and the next session is set for January 14 in San Diego. The study group met most recently in Piscataway, New Jersey, on October 13, the day before the FCC adopted new Part 15 rules to govern BPL deployment. ARRL Lab Manager Ed Hare, W1RFI, told those attending that gathering that any BPL standards must address issues of electromagnetic compatibility (EMC).

"The consensus of the committee is still that dealing with emissions and EMC is very high on the importance list," Hare said later. In terms of EMC, he said, the components of any IEEE BPL standard should "include the needs of the BPL industry to have a workable environment in which to manufacture and market BPL technology while addressing the need for licensed radio services to operate in an environment that does not result in harmful interference."

Hare's presentation focused on explaining why the BPL industry's measurements using spectrum analyzers and test probes differ from the impact BPL emissions have on communications receivers attached to typical amateur antenna systems.

"I also continued to extend our offer to work cooperatively with industry representatives," Hare said. The ARRL and the FCC's Enforcement Bureau have a long history of cooperating in resolving Part 15 interference complaints resulting from power line noise.

Hare and ARRL Chief Technology Officer Paul Rinaldo, W4RI — who attended a July study group meeting in Piscataway — have been charged with drafting the part of the IEEE study group's "white paper" dealing with affected radio services, including Amateur Radio. Other aspects of the document will include safety; compatibility between access BPL and in-home BPL; compatibility with utility distribution systems, and security, privacy and authentication issues.

Following the July study group meeting, Rinaldo said the consensus of participants was that the core issue confronting the BPL industry was dealing successfully with the issue of interference from and to BPL. "BPL won't survive unless that

fundamental problem is solved soon," Rinaldo asserted.

Rinaldo also took part in a Power Line Communications Association (PLCA) Strategic Summit and Business Briefing in late October in the DC area. His presentation concluded, among other things, that best practice for the BPL industry would be to avoid Amateur Radio spectrum at the equipment design level.

A few days earlier, Rinaldo had represented the League at a meeting of the National Association of Regulatory Utilities Commissioners (NARUC) Broadband over Power Lines Task Force.



ARRL Propagation Forecast Bulletin

Propagation Forecast Bulletin 50 ARLP050
From Tad Cook, K7RA
Seattle, WA December 3, 2004
To all radio amateurs

Sunspot numbers and geomagnetic activity were both up slightly over the past week. Average daily sunspot numbers were low, rising from 50 to 55.1 since the week before. Average daily solar flux rose from 103.8 to 110.9 over the same period.

During November the average daily sunspot numbers were 70.5. This is slightly lower than the 77.9 average for October.

Geomagnetic indices were unsettled over the past week, with daily A indices for both mid-latitude and high latitude in the mid to high teens.

Over the next few days the solar flux should decline. The predicted daily solar flux for Friday December 3 through Monday December 6 is predicted to be 105, 100, 100 and 95. Solar flux should reach a near term low around December 8-9 at 90. Geomagnetic conditions should remain quiet until December 6, when the predicted planetary A index is 20. This may be far enough off to have good quiet conditions for the ARRL 160-Meter CW Contest this weekend.

Gary Johnson, K5SWW wrote to mention an interesting propagation condition he monitored this weekend toward the end of the CQ World Wide CW DX Contest. From 2100-2200z, 10 meter CW signals from Scandinavia were heard quite strong at his home in Paradise, Texas, which is northwest of Dallas/Fort Worth, Texas. Some were quite strong and a little raspy. He notes that it was dark in Scandinavia, and he was surprised to hear their signals on a daylight band. Did anyone else experience this?

If you would like to comment or have a tip, email the author at, k7ra@arrl.net.

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 November 25 through December 1 were 61, 61, 64, 66, 40, 42 and 52 with a mean of 55.1. 10.7 cm flux was 109.4, 111.1, 110.3, 112.8, 111.4, 110.6 and 111, with a mean of 110.9. Estimated planetary A indices were 20, 13, 10, 14, 15, 15 and 13 with a mean of 14.3. Estimated mid-latitude A indices were 19, 16, 10, 16, 20, 16 and 11, with a mean of 15.4.



ARRL DX Bulletin

DX Bulletin 48 ARLD048
From ARRL Headquarters
Newington CT December 2, 2004
To all radio amateurs

This week's bulletin was made possible with information provided by K3ZM, QRZ DX, the OPDX Bulletin, The Daily DX, 425DXnews, DXNL, WA7BNM and Contest Corral from QST. Thanks to all.

FIJI, 3D2. Steve, G0UIH is QRV as 3D2FI from various islands until December 11. QSL to home call.

VIETNAM, 3W. JA7GAX will be QRV as 3W2GAX from Ho Chi Minh, Con Son, IOTA AS-130, and Phu Quoc, IOTA AS-128, while here from December 7 to 28. QSL to home call.

KUWAIT, 9K. Murtada, 9K2MU has been active on 160 meters around 0300z. QSL direct via WA4JTK.

THE GAMBIA, C5. Henryk, SM0JHF is QRV as C56JHF for about 10 days. Of late, he has been active on 30 meters around 0015z and 80 meters using CW around 2130z. QSL via operator's instructions.

JUAN FERNANDEZ ISLAND, CE0. Eliazar, CE0ZIS is QRV from here for about 10 days. QSL via operator's instructions.

DOMINICAN REPUBLIC, HI. Mike, HI3/GW3UOF is QRV on all bands until December 12. QSL direct.

JAPAN, JA. Special event station 8N0SON is QRV during the Special Olympics World Winter Games in Nagano until March 5, 2005. QSL via JF0JYR.

MONGOLIA, JT. Timur, JT1BE has been QRV using RTTY on 20 meters around 0130z. QSL direct.

ANTARCTICA. Mike, KC4AAA is QRV from the South Pole and has been active on 20 meters SSB from 0040 to 0200z. QSL via K1IED.

ST. PETER AND ST. PAUL ROCKS, PY0S. Joca, PS7JN is QRV as PY0S/PS7JN in his spare time until December 10 and has been active on 20 meters using RTTY around 1800z. QSL to home call.

SUDAN, ST. Hugo, ST2YJ has been QRV on 30 meters around 1700z. QSL via LA4YW.

CONGO, TN. Baldur, DJ6SI will be QRV as TN6X from December 4 to 12. He will be active on all bands using CW. QSL to home call.

ST. KITTS AND NEVIS, V4. Peter, K3ZM is QRV as V47ZM until December 5. He is active on 160 meters using CW and SSB and will also participate in the ARRL 160-Meter contest. QSL to home call.

CANADA, VE. Special event station VC9COAL is QRV until December 31. QSL via VE9WGS.

CHRISTMAS ISLAND, VK9X. Charlie, VK9XG is QRV until December 9 and has been active on 20 meters using RTTY around 2300z. QSL via W0YG.

ANDAMAN AND NICOBAR ISLANDS, VU. Team members from the National Institute of Amateur Radio, NIAR, are QRV as VU4RBI and VU4NRO from Andaman. This is not a major DXpedition. Activity will be limited to a few bands using CW and SSB, depending on propagation. QSL via operators' instructions.

MONTSERRAT, VP2M. Amateurs Mike, N9NS, Pete, N0FW, Charlie, W6KK and John, N7CQQ are QRV as VP2MNS, VP2MW, VP2MKK and VP2MQQ, respectively. Activity is on 160 to 6 meters, including 60 meters. They will participate in the ARRL 160-Meter contest and the upcoming ARRL 10-Meter contest as VP2MW. QSL all calls via W8QID.

THIS WEEKEND ON THE RADIO. The ARRL 160-Meter CW Contest, ARRL International EME Contest, ARCI Topband Sprint, TARA RTTY Melee, Wake-Up! QRP CW Sprint, TOPS Activity Contest, CIS DX CW Contest, ARCI Holiday Spirits Homebrew CW Sprint and the ARS Spartan December CW Sprint will certainly keep contesters busy this weekend. Please see December QST, page 85, and the ARRL and WA7BNM contest websites for details.

A Little Knowledge is Dangerous

By Paul Dunphy, VE1DX

One of the local QRPers bolted around the curve and made his way quickly up the hill. This one was in a hurry and he was beaming confidence with the brilliance of one of those quartz-halogen headlights! A QRPer with new found DX knowledge. Of this we were sure for we had seen this many times before.

As we approached we thought of the newly minted QRPers and the process all DXers had to go through. As each one passes along the normal progression to being one of the Big DX Guns, with totals well over three hundred, there are levels of DX knowledge gained at each step. And this

QRPer had obviously just found out something that might increase his DX totals. What else makes a DXer happy? Nothing. DXers live for more DX. That's the way it's always been and that's the way it always will be.

"I have great news!" he began, looking at us and puffing a bit from his quick trip up the hill. "Did you know there are really two solar cycles instead of one?" This was not what we had expected. "Everyone knows that, more or less, solar cycles come and go in eleven year cycles. DXers pay more attention to this than any other amateur does. Just ask the Palos Verdes Sundancers" we replied, confident we had headed this off. "No!" the QRPer replied confidently, "No, that is all wrong. The folks at NASA and the Jet Propulsion Lab in Pasadena have known for years that the solar cycle actually is a 22-year cycle, not 11. And they have scientific proof, gathered from satellite observation and shuttle experimentation. All we have is a 'gut feeling' and some theories based on a group of Sundancers down Palos Verdes way. And I'm here to explain the difference!"

We weren't sure we wanted to hear the difference. For as we were thinking about the different levels of knowledge a DXer gains along the way, we were also thinking about how many times they re-invent the wheel. While DX knowledge is the most important thing a DXer can accumulate, after DX totals that is, the source of this knowledge has to be balanced. There are two good sources of DX knowledge and any DXer who has been around the track a few times will tell you this. The first is gained from listening to the Old Timer, from reading the DX bulletins, listening to the rumors and the like on the repeaters and from watching the messages on the DX clusters. And the second is gained from experience. Along this road to DX understanding a QRPer must accumulate all this knowledge from both sources. But what makes him different, what makes him a true-blue DXer is not measured in sheer volume of knowledge, but rather in the accuracy of this knowledge and gaining the ability to sort the good from the bad. The DXer that can do this will become one of the deserving . . . one who will understand the Inevitable Truths of DXing, the Mysteries of the Ages and the Eternal Enigmas that separate QRPers from true-blue DXers. Absolutely.

We never got a chance to explain this because the QRPer ploughed right on with his new theory on solar cycles. "You see," he explained, "the reason we have solar cycles is that the polarity of the sun reverses, with the north pole moving southward and actually doing a complete 360 degree rotation and re-appearing back where it started. And this internal revolution takes place over 22 years. And so, while it may seem that the solar cycle is 11 years, it really is 22. Understand?"

We didn't. This QRPer had the habit of ending almost everything with "Understand?" And while we didn't, we decided it best not to show our ignorance of solar physics and the like. So we countered with our own logic. "It seems to us that we are running into a Bull Market for DX right now" we replied, neither acknowledging understanding nor the lack of it. "The flux is rising and there is more DX for everyone, although for some more than others. And for as long as we can remember, both sunspots and DX come in 11-year cycles." The QRPer didn't even blink, "Yes, that may be so, but you have to admit that the 22-year cycle is very exciting news and an important factor. As to whether it is in phase with the so-called 11 year cycle is yet to be determined. And I will be researching that as well. But for now, let's concentrate on the 22-year cycle. It also happens that as the solar polar region moves along its path, magnetic loops are spiraled outward and fold back into the sun. Understand?"

We didn't understand a thing at this point, so we just sat there with a blank face. "I've also done some researching on the behavior of the earth's magnetic field. And you know that I've found that there are also magnetic loops that exit and enter the earth at approximately 30-degree intervals of latitude, intersecting with 60-degree intervals of longitude. Now, when the solar wind intersects the bow shock of the interplanetary magnetic field, it follows that there will be enhanced areas of magnetic activity at these points. This will lead to a fluctuation in the electrical currents in the ionosphere between these points, creating a grid of enhanced electrical lines. Understand?" At this point the QRPer was jiggling with joy at the thought of what he had discovered and that he was finally able to tell us a few things that we did not already know.

He was right! We were beyond even thinking about what the QRPer was saying. Our brain muscles were starting to hurt so we decided the only thing to do was to get a second opinion. If nothing else, it

would keep the QRPer quiet for a few minutes. So we took him up the hill to discuss this with the Old Timer. He repeated his newly acquired knowledge as the Old Timer sat back and listened in silence. Predictably, he wound down looking the Old Timer in the eye and saying, "Understand?"

The Old Timer stared right back at him and replied, "Yes." Son of a Gun! Maybe the Old Timer had been doing a bit of research of his own. We were starting to worry that the QRPer might be onto something here. And if it would enhance our ability to work DX, we decided we had better pay a bit more attention.

The Old Timer looked at the QRPer and continued, "You've discovered something that not many know. In particular, this business of the magnetic anomalies here on earth and the fact that they fold back at 30 and 60-degree intersections . . . that is one of the most tightly guarded DX secrets." The QRPer beamed with pride and then snapped to his feet with a sudden wave of enlightenment. "I've always wondered why some people work more DX than others. And I always attributed it to a low tower and low power going up against a high tower and high power. But that has nothing to do with it! It's where you live, isn't it? If you happen to live near one of these intersections where the magnetic loop enters or leaves the earth's surface, you are bound to work more DX, right?" The Old Timer was non-committal and we just stared at the two of them. The QRPer rolled on, almost going into self-oscillation with pride, "I bet if I look at the DXCC leaders and where they live, I'll find they are concentrated around these areas."

The Old Timer just looked and nodded slowly as the QRPer picked up speed. "Furthermore, I bet there aren't many places left that aren't staked out. But I'll find one! I'm still young and I don't mind moving. I'll find a magnetic intersection point and I'll be on Honor Roll in a quarter of the time it will take me to do it from here." And with this, he raced out the door and was off down the hill.

We looked over at the Old Timer and asked slowly, "Is he on to something?" The Old Timer shrugged and said, "Don't think so. But take a look on the map and see where the sparsely populated areas are that intersect 30 degrees latitude and 60 degrees longitude." We had a quick look and turned back to the Old Timer, "Looks like there's one in China. And another one is in Russia, just below the Arctic Circle. Then the middle of Argentina seems to be about the only other place that qualifies . . . pretty well everywhere else is heavily populated or over the oceans."

"I noticed that," the Old Timer replied, "I think he might have to do some thinking about balancing his academic knowledge against his experience. But then again, maybe he's right." Somehow we didn't think so, but at times like this it is best to leave the Old Timer alone. After all, he'd gotten rid of the QRPer for us! And no one argues with success. But somehow we felt that once the QRPer had dug out his atlas and did a bit more research, he'd be back to enlighten us again. We didn't think we could take any more enlightenment for a while, so we started thinking about that trip to Phoenix the XYL had been talking about. And while it hadn't been our first choice of things to do, it had suddenly become more attractive. As Albert so often said, "All things are relative, some more so." And we knew better than to argue with Albert in situations like this!



Helpful Hints

Having trouble getting the ketchup out of the bottle? Simply insert a straw and blow ***real hard!***



Shallow Thoughts

Is it possible to be totally partial?

Carbon Amateur Radio Club – 2004-2005 Officers

President: Anthony "Goody" Good, K3NG, goody@fast.net
Vice President: Rob Roomberg, KB3BYT, roomberg@ptd.net
Secretary: Brian Eckert, KB3KLJ, eckertb@ptd.net
Treasurer: John Schreibmaier, W3MF, w3mf@ptd.net
W3HA Callsign Trustee: John Bednar, K3CT, k3ct@fast.net
W3HA Repeater Trustee: Bob Wiseman, WB3W, rwiseman@ptd.net
Public Information Officer: Lisa Kelley, ldkelley@voicenet.com

Directors

Bob Culp, KB3IDV
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Bob Wiseman, WB3W, rwiseman@ptd.net

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
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