



The Illuminator



The monthly newsletter of the Carbon Amateur Radio Club

January 2005

January Meeting

The next regular meeting of the Carbon Amateur Radio Club will be on Thursday, January 20, at 7:30 p.m. at the Emergency Operations Center in Nesquehoning. Our program for the evening will be a show of homebrew and/or QRP equipment by you, the membership! Come and show us your pet projects!

See you at the meeting!



Carbon Amateur Radio Club Regular Meeting Minutes December 16, 2004

Meeting was called to order at 19:38 hrs. In attendance were:

K3NG, KB3BYT, N3DIY, WA3IEM, WB3W and W3EFI.

Previous Balance	\$849.98
Receipts (dues)	\$0.00
Sub-total	\$849.98
Disbursements (newsletters)	\$11.84
Final Total	\$838.14

Bob, WB3W, made motion to accept; seconded, and approved.

Old Business

Goody, K3NG, read the past minutes of the November meeting. Some points were:

1. Didn't get a chance to look at voting requirements for club members.

2. Need to check for examples of old magnetic signs that were used in the past so we can show the vendor samples of what we need for the upcoming new order.
3. N3VAE offered to explain the weather certification information for the Feb meeting. (relayed via Bob, WB3W)
4. January's presentation will be for members to bring their homebrew and QRP rigs for a kind of show and tell.

New Business

Bob, WB3W, asked if there was any interest in an EMCOMM course. Some of the main points discussed on this course were:

1. Course cost is \$40.00 for ARRL members, \$75 for non-ARRL members.
2. Most of the course can be done on-line.
3. Bob is certified to teach the course.
4. It is an 8-week course by design but can be done quicker.
5. It is for emergency communication. Talks about what you should be prepared for in case of an emergency.
6. Emergency vs. drill situations.
7. The stress of handling emergency traffic.
8. What is the correct mode of communication to use. Why and When.
9. A mentor is assigned to a group of students.
10. As of now, the cost of the course is returned to the student upon completion of the course.
11. Will check for club member interest. It will be a hybrid course taught by Bob, WB3W.
12. Possible Saturday morning class.

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Darryl, N2DIY motioned to adjourn the meeting at 20:05; seconded and carried.

Goody, K3NG, gave a very informative presentation on BPL and its effects on Amateur radio.

(Editor's note: Thanks to Denny, W3EFI, for taking the meeting notes.)



ARRL Renews Demand for FCC to Shut Down New York BPL Field Trial

(From the ARRL Letter)

The ARRL has once again asked the FCC to shut down a BPL field trial now under way in Briarcliff Manor, New York. It's also asked the Commission to withdraw the system's Part 5 Experimental authorization. After the League's first shutdown request in October, the chief engineer of Ambient Corporation, which provides the pilot project's BPL hardware and holds the Experimental license, suggested that Amateur Radio interference complaints had been addressed through improved software and notching performance. Not so, says a December 17 letter to the FCC from ARRL General Counsel Chris Imlay, W3KD. Writing on the League's behalf, Imlay contends that the FCC is not sticking to its commitment to prevent interference to Amateur Radio from BPL systems and to enforcement where interference occurs.

"Based on the Commission's complete inaction to date with respect to documented interference complaints at various BPL test sites, the commitment seems vacuous," Imlay said. "ARRL demands that this BPL site be shut down immediately, pending compliance determinations and a demonstration that the system can operate without causing harmful interference." ARRL member Alan Crosswell, N2YGK, a resident of the community, has documented interference, complaints and related information on his "BPL in Briarcliff Manor" Web site <http://www.columbia.edu/~alan/bpl/>.

Imlay says another complaint from Crosswell and the League's own observations on December 16 confirmed the existence of harmful interference on

20 meters "sufficient to preclude virtually all Amateur Radio communications."

ARRL observations December 16 indicated that BPL noise "precludes or repeatedly disrupts" ham radio communication using typical receivers. The harmful interference was noted at a distance of approximately three-quarters of a mile from the modem, affecting a wide area, "unlike Part 15 point-source radiators," Imlay said.

The December 17 letter went to FCC Enforcement Bureau Chief David Solomon, FCC Deputy Office of Engineering and Technology (OET) Chief Bruce Franca and OET's Experimental Licensing Division Chief James Burtle. Copies went to Ambient Chief Engineer Yehuda Cern and to FCC Special Counsel Riley Hollingsworth. In cooperation with utility Consolidated Edison, Ambient has been operating the Briarcliff Manor BPL system under an experimental license, WD2XEQ.

The FCC should shut down the Briarcliff Manor BPL field trial and pull the Experimental license too, Imlay argued. "Given the unsupported and demonstrably false allegations contained in the Ambient October 12, 2004, response to ARRL's interference complaint," he concluded, "the Commission should rescind the experimental authorization as well, and determine other appropriate sanctions against Ambient Corporation."

The Briarcliff Manor BPL system was the focus of a March 2004 front-page Wall Street Journal article, "In This Power Play, High-Wire Act Riles Ham-Radio Fans," by technology writer Ken Brown. ARRL staff members accompanied Brown to the BPL site so he could hear the interference firsthand.



Morse Requirement, License Restructuring Remain on FCC's Radar

(From the ARRL Letter)

The ARRL does not anticipate the FCC will offer up any proposals on the Morse requirement and further restructuring of the Amateur Radio licensing system until sometime in mid-2005, possibly sooner. The FCC Wireless Telecommunications

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Bureau continues to review thousands of comments it received on 18 petitions for rule making — including one from the ARRL.

The various petitions called for eliminating or altering the Morse code requirement and changing other sections of the Amateur Service Part 97 rules, including further restructuring of the amateur licensing system.

In addition to agreeing on other changes affecting Amateur Radio, World Radiocommunication Conference 2003 (WRC-03), left the choice to require Morse proficiency for HF access up to individual countries, and several already have dropped Morse code as an examination requirement. That has not yet happened in the US.

Before the FCC adopts any changes in the Morse requirement and the license structure, it must complete its comment review, issue a Notice of Proposed Rule Making (NPRM) reflecting its interpretation of consensus within the amateur community based on comments received and invite further comments on the NPRM. The FCC then will review those comments before issuing a Report and Order that spells out any final rules. The ARRL does not anticipate any changes in the Morse requirement or in other Amateur Radio licensing requirements before 2006, possibly later.

While this rule making process is under way, no changes have been made in the Amateur Radio Service rules. The 5 WPM Morse code requirement (Element 1) to gain HF privileges in the US remains in place, and no proposed automatic upgrades or other rule changes have been put into effect. The ARRL has posted answers to frequently asked questions on its own restructuring proposals <http://www.arrl.org/news/restructuring2/faq.html>.



Shipwrecked (Thanks to Hans Brakob, K0HB)

There was this DXer, who in the valley of the sunspot cycle, decided to take a cruise ship trip in the south Pacific for the first time. It was wonderful, the experience of his life. He was being waited on hand and foot. But, it did not last. A typhoon came up unexpectedly. The ship was blown onto some uncharted reef and sank almost immediately.

The man found himself, he knew not how, swept up on the shore of an island. There was nothing else anywhere to be seen. No person, no supplies, nothing. The man looked around. There were some bananas and coconuts, but that was it. He was desperate, and forlorn, but decided to make the best of it. So for the next four months he ate bananas, drank coconut juice and mostly looked to the sea mightily for a ship to come to his rescue.

One day, as he was lying on the beach stroking his beard and looking for a ship, he spotted movement out of the corner of his eye. Could it be true, was it a ship? No, from around the corner of the island came this rowboat. In it was the most gorgeous woman he had ever seen, or at least seen in 4 months. She was tall, tanned, and her blond hair flowing in the sea breeze gave her an almost ethereal quality. She spotted him also as he was waving and yelling and screaming to get her attention. She rowed her boat towards him.

In disbelief, he asked, "Where did you come from? How did you get here?"

She said, "I rowed from the other side of the island. I landed on this island when my cruise ship sank."

"Amazing," he said, "I didn't know anyone else had survived. How many of you are there? Where, did you get the rowboat? You must have been really lucky to have a rowboat wash up with you?"

"It is only me," she said, "and the rowboat didn't wash up, nothing else did."

"Well then," said the man, "how did you get the rowboat?"

"I made the rowboat out of raw material that I found on the island," replied the woman. "The oars were whittled from gum tree branches, I wove the bottom from palm branches, and the sides and stern came from a Eucalyptus tree."

"But, but," asked the man, "what about tools and hardware, how did you do that?"

"Oh, no problem," replied the woman, "on the south side of the island there is a very unusual strata of alluvial rock exposed. I found that if I fired it to a certain temperature in my kiln, it melted into forgeable ductile iron. I used that for tools, and

used the tools to make the hardware. But, enough of that, she said. Where do you live?"

At last the man was forced to confess that he had been sleeping on the beach. "Well, let's row over to my place," she said. So they both got into the rowboat and left for her side of island.

The woman easily rowed them around to a wharf that led to the approach to her place. She tied up the rowboat with a beautifully woven hemp rope. They walked up a stone walk and around a palm tree, there stood an exquisite bungalow painted in blue and white.

"It's not much," she said, "but I call it home. Sit down please, would you like to have a drink?" "No," said the man, "one more coconut juice and I will puke."

"It won't be coconut juice," the woman replied, "I have a still, how about a pina colada?"

Trying to hide his continued amazement, the man accepted, and they sat down on her couch to talk.

After a while, and they had exchanged their stories, the woman asked, "Tell me, have you always had a beard?" "No," the man replied, "I was clean shaven all of my life and even on the cruise ship." "Well if you would like to shave, there is a man's razor upstairs in the cabinet in the bathroom." So, the man, no longer questioning anything, went upstairs to the bathroom. There in the cabinet was a razor made from a bone handle, two shells honed to a hollow ground edge were fastened on to its end inside of a swivel mechanism. The man shaved, showered and went back down stairs..

"You look great," said the woman, I think I will go up and slip into something more comfortable." So she did.

And, the man continued to sip his pina colada. After a short time, the woman returned wearing fig leafs strategically positioned and smelling faintly of gardenia.

"Tell me," she asked, "we have both been out here for a very long time with no companionship. You know what I mean. Have you been lonely, is there anything that you really miss? Something that all men and woman need. Something that it would be really nice to have right now."

"Yes there is," the man replied, as he moved closer to the woman while fixing a winsome gaze upon her, "Tell me ... do you happen to have a 20-meter rig around? This place HAS to be a New One for DXCC!"



ARRL Propagation Forecast Bulletin

Propagation Forecast Bulletin 54 ARLP054
From Tad Cook, K7RA
Seattle, WA December 30, 2004
To all radio amateurs

Solar activity stayed about the same this week compared to the previous period. Average daily sunspot numbers declined slightly from 32.1 to 28. There weren't any disturbed days. Expect solar flux to stay above 100 for the next 10-12 days. Recurring coronal holes could cause a mild geomagnetic upset around January 2-3. Geomagnetic Institute Prague predicts unsettled to active conditions January 2 and 3, unsettled conditions December 31, January 1 and 4, and quiet to unsettled conditions on January 5-6.

This week I finally got around to operating on the new 60-meter band. Actually, the use of this band by radio amateurs has been legal in the United States for almost a year and a half. This band is unusual because operation is on upper sideband phone only, and only on five fixed channels around 5.3 to 5.4 MHz. (See <http://www.arrl.org/news/stories/2003/06/03/1/> and <http://www.arrl.org/FandES/field/regulations/faq-60.html> for details).

I used an inexpensive mono-band 60-meter whip on my car, and found the noise in the city to be quite high. I also found a 2:1 SWR after adjusting the length of the whip. I listened to other stations around the Western United States, and they also reported high noise levels. I talked to a station in Arizona who said I had a good signal from Seattle, which surprised me considering how inefficient the 7 foot trunk mounted whip must be with a length of only 1/25th wavelength. The band or group of channels actually, seems to be open to many areas of the U.S. around the clock, with the strongest

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signals during darkness and the weakest signals around mid-day.

After testing some varying parameters with a propagation prediction program, this definitely looks like a good band for wintertime. Running the same numbers over the path to Arizona from Seattle 6 months from now shows what must be a complete shutdown for about 8 hours centered on mid-day.

Keith O'Brien, N4ZQ is using a program called DX Atlas, by VE3NEA. He asked about Effective Sunspot Number, a parameter used with this program, and wondered how it differs from just plain Sunspot Number. Over four years ago, Effective Sunspot Number was mentioned in bulletin number 38, September 22, 2000. This is a value calculated from real time ionospheric measurements. The value used to calculate this is foF2, the highest frequency that a vertically radiated signal is refracted by the F2 layer and returned to earth.

This definition of foF2 can be found on an interesting page concerning sunspot counting methods at, <http://www.kc4cop.bizland.com/sunspot%20counting%20methods.htm>. The description of how Effective Sunspot Number is derived from foF2 is on the Northwest Research Associates web site at, <http://spawx.nwra-az.com/spawx/ssne.html> and <http://www.nwra-az.com/spawx/ssne24.html>.

There are a number of links to other interesting pages on the NWRA Space Weather Services web site at, <http://spawx.nwra-az.com/spawx/ssne.html>.

Don't forget this Friday, otherwise known as New Year's Eve, is Straight Key Night! This casual on-air event runs from 0000-2400z on January 1, 2005. The emphasis is on having fun, ragchewing, and keeping alive the tradition of operating CW the old-fashioned way. I am going to use a beautiful old J-37 key and operate from my car. See <http://www.arrl.org/contests/rules/2005/skn.html> for details, and for soapbox comments from participants in the 2004 event, look at http://www.arrl.org/contests/soapbox/?con_id=62.

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 December 23 through 29 were 47, 42, 26, 16, 11, 27 and 27 with a mean of 28. 10.7 cm flux was 96.4, 97.2, 93, 91.7, 96.9, 105.2 and 98.5, with a mean of 97. Estimated planetary A indices were 6, 4, 12, 10, 7, 16 and 18 with a mean of 10.4. Estimated mid-latitude A indices were 5, 2, 6, 9, 6, 12 and 16, with a mean of 8.



ARRL DX Bulletin

DX Bulletin 52 ARLD052
From ARRL Headquarters
Newington CT December 30, 2004
To all radio amateurs

This week's bulletin was made possible with information provided by NC1L, ON4UN, SQ9FMU, TA3YJ, QRZ DX, the OPDX Bulletin, The Daily DX, 425DXnews, DXNL, WA7BNM and Contest Corral from QST. Thanks to all.

MAURITANIA, 5T. Yves, F6GDC, Pierre, F6CQX and Eric, F5SSM are QRV as 5T5DY until January 9. In addition to being active on Nouakchott, they also plan to operate from Atar, Tergit and Banc d'Arguin islands. Activity is on 40 to 10 meters using SSB, with some CW. QSL via F6GDC.

PAKISTAN, AP. Ijaz, AP2IA has been QRV using RTTY on 20 meters around 1300z. QSL direct.

HUNGARY, HA. Look for special event station HA200CVM to be QRV during January 2005 to dedicate the remembrance of poet Csokonai Vitez Mihaly. QSL via HA0NAR.

DJIBOUTI, J2. J20FH has been QRV on 30 meters around 1920 to 2130z. QSL via F5PRU.

BELGIUM, ON. In celebration of the 175th anniversary of the kingdom of Belgium, and its 25th year as a federal state, during 2005 all Belgium amateurs may use the OO prefix in lieu of the

regular ON prefix. Club station ON4UBA will be active as OO175B for regular contacts, but will not be used in HF contests. QSL via operators' instructions.

ARUBA, P4. Ed, W0YK will be QRV as P40X from January 3 to 11. He will be active using CW on the low HF bands and newer bands. He will also use RTTY, which includes being an entry in the upcoming ARRL RTTY Roundup. QSL to home call.

POLAND, SP. Look for SQ75FMU to be QRV from January 1 to 20, and then from February 15 to March 15 to celebrate the 75th anniversary of the Polish Amateur Radio Union, or PZK. QSL via SQ9FMU.

EGYPT, SU. Mike, SU9NC has been QRV on 80 meters around 0430z and then 40 meters around 0520z. QSL via OM2SA.

TURKEY, TA. Berkin, TA3J will be QRV as TA3J/60 from January 1 to March 1 from Antalya. Activity will be on 160 to 10 meters, including the newer bands, 2 meters and 70 centimeters, using all modes. QSL direct via TA3YJ.

TURKS AND CAICOS, VP5. Saul, WA1UKN will be QRV as VP5/WA1UKN from Grand Turk Island, and then North Caicos, from January 4 to the 28. Activity will be on 40, 17, 15, 12 and 10 meters using SSB. QSL to home call.

THIS WEEKEND ON THE RADIO. The ARRL Straight Key Night, Kid's Day Contest, HA Happy New Year Contest, SARTG New Year RTTY Contest, New Year's Snowball Contest, AGCW Happy New Year CW Contest, Original QRP CW Contest and the AGCW VHF/UHF CW Contest will certainly help ring in the New Year. The Lighthouse Christmas Lights QSO Party runs until January 2. Please see December QST, page 85, January 2005 QST, page 102 and the ARRL and WA7BNM contest websites for details.



Four is Enough
By Paul Dunphy, VE1DX

It is the mystery and the dark way

That makes DXers weep so sore
They know not why the list went away
They only know today there's four!

One late summer afternoon we were deeply involved in wondering how one joins the Quarter Century Wireless Association. Not that we were anywhere near being qualified, but all amateurs, and maybe DXers more so, wonder about things. Especially when the bands are flat. And as we pondered this rather important topic, here comes one of the local QRPers up around the curve of the hill. We smiled our smile of greeting. Possibly we should have barred the gate and hid in the shack. We soon learned why this QRPer was out in the afternoon sunshine. He was off to a fast start.

"When are they going to do something about all these Internet DX lists, or as they like to call them, DX Reflectors?" he demanded, the tone of his query giving us an instant feeling that when he said 'they' he was meaning 'you.' 'Me!' we said to ourselves and we were at an instant disadvantage. Not an unusual situation when the QRPers corner us. And this one was just warming up. So we just nodded for him to continue.

"Yes!" he continued, "there was a single DX mailing list on the Internet up until a couple of months ago. And the fellow who ran it gave it up. He said he was sick of all the complaining and arguing and whining. So he packed it in and gave up. And then about three or four other groups started up their own lists. One even got all the E-mail addresses from the original guy and automatically re-subscribed everyone. Now I get three or four copies of everything and my computer is starting to fill up! Why isn't there just one DX Reflector, like there was for the past five years or so?"

Possibly by this time we were blinking a bit. It was not that we hadn't heard all of this before. And we did have some divergent ideas on what he'd already said. But it was the vehemence in which the QRPer delivered his words. This one was wound up!

We thought we should get a vagrant thought in, maybe something to dull the sharp edge of this one's attack. "Possibly you may have something there," we said, "but remember there are a lot of different interests within this world of DX. And," we continued, even smiling brightly, "can't you just

delete the messages that don't interest you? How about that . . . and don't you think that maybe . . . "

We never completed the thought. "Hogwash!" shouted the local QRPer, "all we need is one source of information. And a good DXer doesn't spend all his time in front of a computer hitting a delete key! He uses the information he obtains and nails the DX. With all these duplicate and triplicate messages, and having to read them to make sure they are indeed a repeat, I don't have any time to tune the bands anymore! Why don't these Reflector operators leave me alone and let me work DX? What's wrong with them?" And he drew himself up to his full five and a half feet and glared at us with his beady little eyes. "When are they going to do something about it?"

As we had noted earlier, this QRPer had a way of saying 'they' but all we were hearing was 'you.' Did he think we were going to start a mailing list? Or that we had helped getting one going? The QRPer was still glaring at us, demanding our attention. "These blasted lists", he snorted, "can you imagine what it's like to be on three or four of them?"

We decided that the only way to handle this QRPer was to fight back, so we jumped to our feet and stared right back at him, "And how did you get on these lists to begin with?" we roared, "just how is it you are on all these lists and then come up here expecting us to help you!" It must have been the look of resolve in our eye and the clenched fists, for the QRPer sat back down and lowered his tone a bit.

"Well", he retorted, "when the original list caved in, I subscribed to the next one that showed up. And then another one came along that offered QSL information as well as DX bulletins, so I joined that one too. And then a third one started up that seemed to have a lot of the Big Guns excited, so I signed up for that too. And then a fourth group took all of the original names and started their own. And that's how I ended up on all of them. But what good does that do me now? I still get about a hundred messages a day!" And with that he folded his arms across his chest and gave us the familiar 'so there!' look.

At this point the answer was so obvious we decided that it was best not to suggest it. We just let the

QRPer sit there. And the longer he sat the less comfortable he looked. It was clear he was thinking things through. Maybe, given enough time, he would see the elephant. Finally he got to talking again, "You know, I just had an idea. If I can unsubscribe to all those lists then why can't I just unsubscribe to most of them?" We looked at him for a moment, took a deep breath and said nothing. We recalled back in the early days, when things that are so obvious to us now were Eternal Enigmas. Mysteries of the Ages that we had discussed time and time again with the Old Timer. Inevitable Truths that we only came to understand with experience. And while it was easy for us to now see the apparent, probably the QRPer had just hit a moment of true enlightenment. And who were we to take it from him? For as Albert had so often said, "All things are relative, some more so." The QRPer stood up, confident that his problems would soon be over. "If I don't like it, I don't have to belong to it, do I?" We simply nodded in agreement as he made his way out the door and off down the hill.

As we watched him go, we were glad that we didn't run any lists, or have a lot to do with computers. For something the QRPer had said stuck . . . what about the fellow who had automatically signed up all these DXers? It seemed to us that while we had to put up with a few minutes of stress and one unhappy camper, there may be some in the coming days who would be a lot worse off than we were.



Helpful Hints

No time for a bath? Wrap yourself in masking tape and remove the dirt by simply peeling it off.



Shallow Thoughts

Can you build a time machine and then use it to go back in time and prevent yourself from ever building a time machine?

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 Schreibermaier, W3MF, w3mf@ptd.net
W3HA Callsign Trustee: John Bednar, K3CT, k3ct@verizon.net
W3HA Repeater Trustee: Bob Wiseman, WB3W, rwiseman@ptd.net
Public Information Officer: Lisa Kelley, ldkelley@voicenet.com

Directors

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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 2:00 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.

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