



The Illuminator



The monthly newsletter of the Carbon Amateur Radio Club

April 2005

April Meeting

The next regular meeting of the Carbon Amateur Radio Club will be on Thursday, April 21, at 7:30 p.m. at the Emergency Operations Center in Nesquehoning.

See you at the meeting!



Carbon Amateur Radio Club Regular Meeting Minutes March 17, 2005

Meeting was called to order at 19:40 hours. In attendance were:

KB3LFD, KB3IDV, N3AT, W3EFI, K3NG, KB3GPM, KB3FSU, KO3M, KB3BYT, WA3IEM, WB3W, KB3LYS, James Hicks (no call).

The February meeting minutes and March Treasurer's report were both accepted.

The Treasurer's Report is shown as per email:

Treasurer's Report

Previous Balance	\$901.30
Receipts (dues)	\$190.00
Sub-total	\$1,091.30
Disbursements (\$5.92 – newsletters (K3PH), \$108.56 – PA QSO Party food and supplies (WA3IEM))	\$114.48
Final Total	\$976.82

Old Business

Bob, WB3W, showed a sample magnetic sign. It read:

CARBON ARC
Mobile
Communications

The sign had logos either side of the word 'mobile'. The cost is \$3.00. Bob, WB3W, took orders from most of the people in attendance. The sign will be available for the next meeting.

Rob, KB3BYT, talked about making up a database of books that club members have. He is working with Darryl, N2DIY, on the database.

Bob, WB3W, brought up the emcomm classes. It was decided to start the class in July due to upcoming activities in the coming months. He was thinking of starting with an initial meeting to get people started. then letting the students study on their own, and then have a final meeting.

The members were reminded of a SKYWARN class coming up on April 9th at 10 am. The class will be held at Penn Forest Fire station #2 on Rt 534. Directions can be found on the club web site at:

<http://carc.wb3w.net>

New Business

Membership dues are due by April 1st.

It was discussed whether to consolidate the 3 CARC web sites into one. It was noted that the sites do have links to the other club sites.

A question was raised about having email address listed on the club site: the concern being that spammers can harvest the members addresses. It was suggested to convert the listing of address into a photo format so that spammers would not be able to scan the addresses from the web site.

Contest: Bob, WB3W, noted that the Mid-Atlantic QSO party will be held on May 14 and 15. The same basic report is used in the exchange. More info can be found at:

<http://www.qsl.net/magso>

Field Day 05: The club has been invited to attend the EPARA FD effort on top of Camel Back Mountain this year instead of having our own effort. This would be a full scale joint effort by both clubs. Rob, KB3BYT, said we would use the EPARA call sign of N3IS.

Some pictures from the EPARA web site were displayed to show the effort that they put into it last year.

If we want to do our own effort, decisions have to be made on where to have it. It was also brought up about having a better effort to keep the stations active during the full contest period.

Some members voiced concern over keeping our club call active during the FD event. A decision must be made by the April meeting.

Bud, KB3FSU, asked about membership cards. Bob, WB3W, and Brain, KB3KLJ, are working on some cards.

Lamar, N3AT, noted the electronics training board that is listed in QST this past month. It cost about \$100 to populate the board. It would be used to explain electronic theory to interested members. Lamar also mentioned a program to turn a computer into an O-scope was also listed.

Rob brought up the idea about showing how to use test equipment as a demo during one of our club meetings.

Motion to adjourn the meeting at 20:35; seconded and carried.

Goody, K3NG, gave a demonstration of antenna modeling software called NEC4WIN95. It is available for a 30 day trial from:

<http://www.orionmicro.com>

Meeting minute taker: Denny, W3EFI, on behalf of Brian, KB3KLJ (thanks Denny!). Minutes respectfully submitted by Brian, KB3KLJ.



Largest-ever Mass Casualty Exercise Will Put Amateur Radio Under Scrutiny

(From the ARRL Letter)

Amateur Radio Emergency Service (ARES) members in Connecticut and elsewhere in the Northeast are poised to take part in what's being characterized as the most comprehensive terrorism response exercise ever conducted in the US. Sponsored by the US Department of Homeland Security as a realistic test of the nation's homeland security system, the exercise — TOPOFF 3 — will run Monday through Friday, April 4-8. Approximately 100 ARES volunteers primarily will support the American Red Cross. Connecticut Section Emergency Coordinator Chuck Rexroad, AB1CR, says that while governmental agencies will comprise the majority of those taking part in TOPOFF 3, Amateur Radio's cooperation with and assistance to the American Red Cross will be under scrutiny.

"We've been assigned evaluators and judges who will be watching what we do and how we do it to determine our suitability for such things in the future," he explained. Rexroad says at TOPOFF 2 a couple of years ago, evaluators pointed to massive communication problems that Amateur Radio could have helped to resolve, Rexroad said. "So we do hope that this will show that we are very relevant in responding to a disaster situation."

The TOPOFF 3 scenario will depict a complex terrorist campaign beginning in Connecticut and New Jersey and leading to national and international response that will include Canada — where the exercise will be known as "TRIPLE PLAY" — and the United Kingdom — where it will be called "ATLANTIC BLUE."

The only nongovernmental organization with a formal role in the recently released National Disaster Plan, the Red Cross has main responsibility for mass care. Rexroad anticipates that ARES will be providing its traditional "backbone" communication support among Red Cross mobile feeding stations, the organization's temporary stationary facilities and other Red Cross units. ARES also will be ready to provide back-up communication support the Connecticut Office of Emergency Management, he said.

Rexroad and Connecticut Section Manager Betsey Doane, K1EIC, have been gearing up for TOPOFF 3 for more than a year. Both hope the ARES role in the drill will provide graduates of the ARRL Amateur Radio Emergency Communications

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courses a chance to put into practice what they've learned — on a national stage.

With the drill just days away, Rexroad said he still needs volunteers. "People who can staff a permanent position, people who can set up a temporary position, people who can do shadowing and — the big one we're missing right now — people who can temporarily put a radio in a mobile Red Cross van," he explained. "The sections surrounding Connecticut have all offered to provide assistance, and we're looking forward to support from Eastern and Western Massachusetts, Rhode Island and possibly even some people from New York." Rexroad has been making the rounds to conduct briefing sessions prior to the drill.

TOPOFF 3 ARES volunteers must be comfortable with a high-security environment, realistic-looking "injuries" and military aircraft flying overhead, Rexroad says. In terms of equipment, he says most operation will take place on VHF and UHF, with an HF link to the National Traffic System only. Headsets are advisable because of anticipated high noise levels. Volunteers will wear matching vests that say "Radio Communications" on the back and "ARES" on the front.

Due to security requirements, all volunteers must register with ARES in advance. Information on the exercise and how to volunteer is on the Connecticut ARES Web site <http://www.ctares.org>.



BPL Inherently Flawed, League CEO Tells Broadband Alternatives Conference

(From the ARRL Letter)

ARRL Chief Executive Officer David Sumner, K1ZZ, told a New York City conference on "Alternative Broadband Platforms" March 18 that broadband over power line (BPL) has "an inherent technical flaw" — interference potential — that cannot be completely nor inexpensively eliminated. He also told the gathering that no BPL system operator can guarantee that its system will always work or that it will be allowed to operate. Sumner said the problem is simple: Power lines were not designed to carry broadband signals, so they can't do it very well.

"BPL is not a radio spectrum user. It is a radio spectrum polluter," Sumner told the Columbia Institute for Tele-Information (CITI) workshop, "Alternative Broadband Platforms: Can They Compete With Fiber Optics? Where?" at Columbia University. "And if the pollution causes harmful interference to an authorized radio station, the BPL system operator has the absolute burden of fixing it — even if that means shutting off the system."

Sumner asked his audience to keep this unique shortcoming of BPL in mind as they compare and consider the alternative broadband platforms discussed. The 70 conference participants included BPL manufacturers and proponents as well as individuals involved in some aspect of broadband telecommunications, members of the academic community and students.

Directed by Eli Noam, KE2PN, CITI held its first workshop on BPL — then called PLC — in February 2002 and has held several more since. This month's event was the first in which ARRL was invited to participate. The conference's entire morning session was devoted to BPL.

In addition to the question of interference, Sumner also raised the legal obstacles confronting BPL. "I think you can see — or hear — why we radio amateurs are concerned," he said after showing the audience a video clip of BPL interference recorded in Briarcliff Manor, New York, last December. "But anyone who is thinking about investing in BPL should also be concerned, because the interference you just heard is illegal," he continued. "It is prohibited by the international radio regulations of the International Telecommunication Union, which the United States must observe as a treaty obligation. It is prohibited by the Communications Act. It is prohibited by the FCC's own rules."

Sumner also spoke about BPL interference complaints involving pilot projects in Iowa and Texas.

The emission limits the FCC has applied to BPL originally were established with intermittent, narrowband, point-source radiators in mind, Sumner explained. "Applying them to a high duty cycle, broadband emitter that is attached to a long conductor such as a power line is like saying that there's no difference between the noise of a helicopter that goes over your house once a day

and one that hovers over your back yard all the time," Sumner said. "You wouldn't complain about the first, but you'd raise quite a fuss about the second."

Most workshop participants, Sumner said, appeared to believe that fiber optic cable close by or to the home — or a combination of fiber and coaxial cable — would be most likely to provide a broadband pipeline in 10 years. "They also liked wireless because of mobility and portability," he added. When asked at the end of the day who would invest in BPL, "only two or three hands went up."

Sumner's prepared remarks plus additional material relating to his CITI presentation are available on the ARRL Web site <http://www.arrl.org/tis/info/HTML/plc/presentations.html>.



Dayton Hamvention Names 2005 Award Winners

(From the ARRL Letter)

Dayton Hamvention has announced the 2005 Amateur of the Year, Technical Excellence Award and Special Achievement Award winners. Dayton Hamvention will host the ARRL 2005 National Convention May 20-22.

The 2005 Amateur of the Year is Alan S. Kaul, W6RCL, of La Canada, California. Hamvention is recognizing Kaul for his ongoing dedication to educating radio amateurs about the many facets of ham radio and to publicizing Amateur Radio through the media. A career electronic journalist who's currently a West Coast Producer for NBC Nightly News, Kaul has been an amateur licensee for much of his life. He was instrumental in the 2002 production of the ARRL video "Amateur Radio Today," for which producer Dave Bell, W6AQ, recruited Kaul's volunteer assistance as a script writer and co-producer. He's now at work on another ARRL project.

The Dayton Hamvention Technical Excellence Award winner is author Jerry Sevick, W2FMI. Among other books, Sevick wrote *Understanding and Using Baluns and Ununs, Transmission Line*

Transformers, Theory and Practice of Transmission Line Transformers, and Building and Using Baluns and Ununs — now out of print. He also authored numerous articles for QST and other Amateur Radio publications. He is noted for a classic series on short vertical antennas that appeared in QST. His April 1978 QST article, "Short Ground-Radial Systems for Short Verticals," is considered a classic.

Receiving the Dayton Hamvention Special Achievement Award is D. Bharathi Prasad, VU2RBI, a prime mover behind the VU4RBI/VU4NRO DXpedition to the Andaman and Nicobar Islands in December. When an earthquake and tsunami struck the region December 26, Bharathi immediately shifted the DXpedition into an emergency communication operation. Her efforts and those of the other DXpedition team members received widespread media attention. One news account dubbed Bharathi "Angel of the Seas" for reestablishing communication links with the Indian mainland and other parts of the stricken region.

There's more information on the Hamvention Web site <http://www.hamvention.org>.



ARRL Propagation Forecast Bulletin

Propagation Forecast Bulletin 13 ARLP013
From Tad Cook, K7RA
Seattle, WA April 1, 2005
To all radio amateurs

We saw a decline this week in average daily sunspot numbers and solar flux. Average daily sunspot numbers were down over 10 points to 34.1 when compared to the previous week, and average daily solar flux declined almost 12 points to 80.2.

The short term prediction shows solar flux values rising slowly over the next week, reaching 100 around April 8. The planetary A index should rise over the next few days. The predicted planetary A index for April 2-5 is 15, 25, 35 and 20.

Just completed is the first quarter of 2005. Now is a good time to take some running averages of sunspot numbers and solar flux, comparing this quarter to previous periods.

From the first quarter of 2003 through the first quarter of 2005, the average daily sunspot numbers were 120.3, 107.3, 110.2, 99.2, 72.9, 71.3, 69.3, 61 and 46.1.

The average daily solar flux for the same period was 134.3, 124.2, 120.8, 137.4, 111.1, 99.5, 111, 104.8 and 96.4.

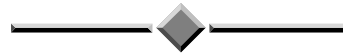
We see clearly that cycle 23 continues the fall toward solar minimum, which is currently forecast roughly around October 2006 to April 2007. Fortunately, the rise of a solar cycle is much more rapid than its decline. But when comparing current smoothed sunspot numbers to the predicted numbers once the next cycle turns up, the predicted value for April 2005 is just slightly above the predicted value for December 2007. So we shouldn't expect conditions to improve beyond what we've had recently until early 2008, or a little less than three years from now. Current sunspot numbers are lower than they've been since 1997. The peak of the next cycle will probably occur in 2010.

March 1965 was 40 years ago. I was still twelve years old, and when riding the school bus home one day in that March, I saw that my mom had hung her red sweater in the window. That was my signal. I couldn't wait for the bus to drop me off so I could race back up the hill. I ran into the house, grabbed the envelope from the FCC off the dining room table, and ripped it open. Inside, there was my new Novice call, WN7CSK. Hard to believe it's been 40 years.

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

For more information concerning radio 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 March 24 through 30 were 57, 65, 41, 35, 15, 15 and 11 with a mean of 34.1. 10.7 cm flux was 87.1, 82.1, 77.7, 78.4, 79.7, 78.8 and 77.6, with a mean of 80.2. Estimated planetary A indices were 6, 18, 16, 13, 4, 5 and 9 with a mean of 10.1. Estimated mid-latitude A indices were 4, 15, 12, 8, 2, 3 and 6, with a mean of 7.1.



ARRL DX Bulletin

DX Bulletin 13 ARLD013
From ARRL Headquarters
Newington CT March 31, 2005
To all radio amateurs

This week's bulletin was made possible with information provided by MM0BQI, NC1L, W4TXL, QRZ DX, the OPDX Bulletin, The Daily DX, 425DXnews, DXNL, WA7BNM and Contest Corral from QST. Thanks to all.

MALAWI, 7Q. Joe, G3MRC and Janet, M0JMP are now QRV from the lake shore at Nkhotakota as 7Q7BP and 7Q7YL, respectively. Activity is on most HF bands. QSL via operators' instructions.

BOTSWANA, A2. Hans, DL7CM and Sid, DM1AYO will be QRV as A25/homecalls from April 6 to 20. Activity will be 160 to 6 meters using CW, SSB, RTTY and PSK. QSL to home calls.

BHUTAN, A5. Stig, LA7JO will be QRV as A52JO from April 4 to 15. QSL via operator's instructions.

UNITED ARAB EMIRATES, A6. Ghis, ON5NT is QRV as A6/ON5NT and has been active on 17 meters around 1430z. QSL to home call.

BOLIVIA, CP. Rene, DF9GR is QRV as CP6/homecall until April 15. Activity is on 80 to 10 meters using CW, RTTY and PSK. QSL to home call.

SCOTLAND, GM. Andre, GM3VLB plans to activate the Isle of May, IOTA EU-123, from April 2 to 9. QSL via operator's instructions. Meanwhile, MM0BQI/p will be active from the Summer Isles, IOTA EU-092, off the Northwest coast, from April 2 to 9. Activity will be on 80 to 10 meters, and possibly 60 meters, using CW, SSB and RTTY. QSL to home call.

SAUDI ARABIA, HZ. Thomas, HZ1EX is here until the end of June. He is usually QRV on 40 meters using CW on most days. QSL via SM0BYD.

ITALY, I. Members of the MDXC will be QRV as IB0CW from Ventotene Island, IOTA EU-045, from

April 2 to 4. Activity will be on 80 to 6 meters, using CW, SSB, RTTY and PSK. QSL via IK8RRY.

DENMARK, OZ. In celebration of the 200th anniversary of the birth of Hans Christian Andersen, special event station OZ5HCA is active until April 30 from Odense, Fyn Island, IOTA EU-172. QSL via OZ3FYN. Meanwhile, DJ4MG and DL1TM are QRV as OZ/homecalls from Vendsyssel-Thy, IOTA EU-171, until April 14. Activity is on 160 to 15 meters using SSB and PSK31. QSL to home calls.

SOMALIA, T5. Joe, VA6JWT, is QRV as 6O0JT from Galkayo. He has been active on 20 meters around 2015 to 2315z. QSL to home call.

NETHERLAND ANTILLES, PJ2. Andy, W9NJY will be QRV as PJ4/W9NJY from Bonaire, IOTA SA-006, from April 2 to 12. Activity will be on 40 to 10 meters using mostly CW with some SSB. QSL via WD9DZV.

BELIZE, V3. Bill, W4TXL will be QRV as V31WC from Placencia from April 4 to 11. Activity will be on 80 to 10 meters, including the newer bands, using mostly SSB. He may concentrate activity on 17 meters. He is here on vacation, so his operating time varies. QSL direct to home call.

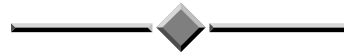
NORFOLK ISLAND, VK9N. Jim, VK9NS has been QRV using RTTY on 15 meters around 0100z. QSL direct.

SOUTH COOK ISLANDS, ZK1. Rick, AI5P will be QRV as ZK1APX from April 4 to 12. Activity will be on 40 to 10 meters using mostly CW. QSL to home call.

OPERATIONS APPROVED FOR DXCC. The following operations are approved for DXCC credit: Chad, TT8M, current operation effective March 9, 2005 (this is a correction from the previous bulletin); Chad, TT8AMO, current operation effective March 9, 2005.

THIS WEEKEND ON THE RADIO. The ARLHS Annual Spring Lites QSO Party, Kids Roundup, SP DX Contest, EA RTTY Contest, Missouri QSO Party, QCWA Spring QSO Party, Montana QSO Party, The RSGB RoPoCo 80-meter CW contest and the 144 MHz Spring Sprint will certainly keep

contesters busy this weekend. Please see April QST, page 99 and the ARRL and WA7BNM contest websites for details.



To Have and to Have Not

By Paul Dunphy, VE1DX

DX in the morning,
DX in the evening,
DX at supper time.
Log that new one right now
But that reflector's mine!

We were sitting on the veranda looking out over the bay, watching the bees' squabble over a particularly attractive flower, when one of the local QRPer's came beating his way up the hill. This one was livid, for he had both fists clenched and he was glaring to the left and right. A real "pile-up busting" QRPer!

"Have you heard what's happened?" he said, getting right to the point and staring right at us with his beady little eyes, "Have you heard?" And, to make his point, he thumped the arm of our chair with his fist. We had heard a lot of things over the years, so we asked for details, "Heard what?"

"About the DX Reflector! The Reflector! It's going off the air. This is terrible. We all depend on it for our DX news. And now it's going away. There will be no more DX!" He was sweating and pacing back and forth. We thought back to the final days of the WCDXB and the final meeting when we had called the gang together. And although the bulletin had run its course, and everyone was disappointed that it had to end, we couldn't recall any arguments or fights. "Everything runs its course," we tried to explain, "and as you know, DX is a moveable feast. Some get on the DX train at one stop and get off at another. And while no one may see the same DX on their part of the train ride, most realize that the train keeps on going. Understand?"

The QRPer stopped pacing and looked at us quizzically. "What?" he said, "What do trains have to do with DXing? And can't you see the problem here? This has far reaching implications!"

We were starting to feel that maybe we hadn't heard the whole story. So we asked, "What's so terrible? There will always be DX. There always has and there always will be. That's the meaning of DX IS! It's the one of the fundamental facts that prove the Eternal Enigmas of DXing and the Mysteries of the Ages. Hasn't the Old Timer explained this to you a dozen times?"

The QRPer was not to be pacified. "Well, the DX Reflector has got to stay," he replied, "and that's the problem. I can understand the current custodian wanting to give it up, but it has to stay. And I'm here to tell you that I intend to see that it does." Son of a Gun! Enlightenment set in. But, when dealing with an agitated QRPer, one soon learns to put forth a poker face. "How so?" we asked.

"I brought it up at the club and I offered my gear to run it. And then another guy said he wanted to do it, but he would need some help. Then I read that a number of other clubs are going to put up other reflectors. And there's even talk of some of the contributors to the current reflector want to take over the equipment and keep this one going. Now, surely you see that I can do a better job than any of them! I have the expertise, the equipment and the DX knowledge to do it. Why won't they leave me alone? I will build a better DX Reflector!"

We took a deep breath and looked at the QRPer for a moment. What could we say? "Build a better reflector and the world will beat a path to your door," we said slowly. "Exactly!" the QRPer said, smiling for the first time, "and I'm glad you see it my way. I can't understand why everyone else doesn't. But I don't care! I'm going to do it." And with that, he was off down the hill, convinced that his way was the only way . . . and the right way. Somehow, we felt that there were other QRPer's in other QTHs doing the same thing. As Lord Baden-Powell, the Hero of Mafeking, so well put it, "Be prepared!" And the QRPer's were prepared. Of that we were sure. But, for what? A good question.

Helpful Hints

Give your friends the impression that you wear contact lenses by blinking frequently midway through conversations and stopping to carefully pull at your lower eyelids.



Shallow Thoughts

If the cops arrest a mime, do they tell him he has the right to remain silent?



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

Bob Culp, KB3IDV
Bill Kelley, KA3UKL, ldkelley@voicenet.com
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://carc.wb3w.net>
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.

Carbon Amateur Radio Club
c/o Bob Schreibermaier K3PH
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Kresgeville, PA 18333-0166