



The Illuminator



The monthly newsletter of the Carbon Amateur Radio Club

July 2006

July Meeting

The next regular meeting of the Carbon Amateur Radio Club will be on Thursday, July 20, at 7:30 p.m. at the Emergency Operations Center in Nesquehoning. Mel, N3EHY, and Joel, WB3IWC, will be presenting a program on their experiences during the Iditarod. Don't miss it!

And, don't forget to meet the gang for supper at 6:00 at Izio's, at the bottom of the hill in Nesquehoning!

See you there!



W3HA Field Day 2006

Once again, a whole bunch of Carbon Amateur Radio Club members descended on the Bott Building in Jim Thorpe on the fourth full rainy weekend in June to operate Field Day. Like last year, the club operated in the 2A class using emergency power with a VHF station. Unlike last year, there was no GOTA (Get On The Air) station.

Here are the gory sadistics:

	CW QSOs	Phone QSOs
80 meters	148	45
40 meters	118	141
20 meters	176	34
15 meters	10	11
6 meters	3	91
Total QSOs	455	322

At two points per CW QSO, one point per phone QSO, plus a power multiplier of 2, our raw score is 2464 points. We expect 1140 bonus points, for a grand total of 3604 points.

For comparison, last year we had 393 CW QSOs and 382 phone QSOs for a raw score of 2336 points. We received 1160 bonus points, for a grand total of 3496 points.

Great job by everyone involved! And, special thanks to Eric, N3TVV, and family for once again providing this year's CARC Field Day site!



Carbon Amateur Radio Club Regular Meeting Minutes June 15, 2006

The meeting was called to order 19:42 local time by Goody, K3NG. In attendance were: Kent WA3IEM, Eric N3TVV, Goody K3NG, Doug KB3LFD, and Brian KB3KLJ.

The treasurer's report was read by Goody, K3NG as follows:

Treasurer's Report

Previous Balance	\$1,250.06
Receipts (dues)	\$15.00
Sub-total	\$1,265.06
Disbursements	-\$4.68
New Balance	\$1260.38

Report was accepted.

Old Business

Goody, K3NG confirmed that Mel Bach, N3EHY will be giving a presentation covering the Iditarod.

Field Day

Kent, WA3IEM gave a site survey report:

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- We have three rooms for our operations
- There are only two support trees at opposite corners. Will be okay for the dipoles.
- We will need 2 x 20 ft masts for the beams
- Setup will be at 6PM on Friday (6/23)
- Kent, WA3IEM will pre-assemble the 6M beam
- We need to location the ARRL flag and club banner
- Feedline is needed:
- Kent has 85' of 9913 for the 6M beam
- Good, K3NG, has some feedline — length unknown, he will check
- Rob, KB3BYT has the open wire dipole

New Business

None.

The meeting adjourned at 20:05 local time.

Following the regular meeting, the logging program and computer keying were checked using the FT-990 and some discussion about logging and operating was held.

Minutes respectfully submitted by Brian, KB3KLJ.



Montenegro is Newest DXCC Entity

DX Bulletin 26 ARLD026
From ARRL Headquarters
Newington CT June 29, 2006
To all radio amateurs

A new ARRL DXCC entity has come into being! As expected, the United Nations admitted the Republic of Montenegro as its 192nd member June 28, and that action automatically makes the tiny Balkan nation the 336th current DXCC entity.

"According to the ARRL DXCC List criteria, entities on the UN list of member-states qualify as political entities," said ARRL Membership Services Manager Wayne Mills, N7NG. "Therefore, effective June 28, 2006 (UTC), ARRL has added The Republic of Montenegro to the DXCC List. Claims for DXCC credit will be accepted immediately."

Current Montenegrin radio amateurs reportedly may continue using their YU/YT/YZ/4O/4N-prefix call signs until the International Telecommunication Union designates a new call sign block for the new country.

In anticipation of Montenegro's new nation status, the International DX Festival Montenegro, with information on the web at, <http://www.yu6scg.cg.yu/international-dx-festival.html>, has been set for July 20 until August 12. That's when several international operators will join forces with Montenegrin Amateur Radio operators from at least three different stations using a common call sign in an effort to meet the DX community's need to work the newest DXCC Entity. Festival organizers have set the ambitious goal of 200,000 contacts for the event, which will use all HF bands.

Montenegro declared its independence on June 3 following a national referendum May 21.



DXCC Announces Rules Change (From the ARRL Letter)

The ARRL DXCC Desk has announced new language to replace the wording of a previously removed DXCC rule pertaining to political entities. The change adds a Paragraph 1(c) under Section II, DX List Criteria, in the DXCC Rules.

"Upon request of the Programs and Services Committee (PSC), the DX Advisory Committee (DXAC) has studied the impact of a change to the DXCC rules," said the announcement. The DXAC, the Awards Committee and the PSC have concurred in the rule change, which became effective June 15, 2006.

The new text at Section II, Paragraph 1(c) reads: "The Entity contains a permanent population, is administered by a local government and is located at least 800 km from its parent. To satisfy the 'permanent population' and 'administered by a local government' criteria of this subsection, an Entity must be listed on either (a) the US Department of State's list of 'Dependencies and Areas of Special Sovereignty' as having a local 'Administrative

Center,' or (b) the United Nations' list of 'Non-Self-Governing Territories.'"

The DXCC Desk says Rule 1(c) is intended to recognize entities that are sufficiently separate from their parent for DXCC purposes but don't qualify under Rule 1(a) or Rule 1(b). "The new rule will cause certain geographic separation entities to be reclassified as political entities," ARRL Membership Services Manager Wayne Mills, N7NG, explains. This, in turn, will reduce the mileage for a first separation for these entities from 800 km to 350 km.

QSOs with any new entity resulting from this rule change will count for credit only for contacts made on or after the start date for that entity. In no case will QSOs made prior to the date of this notice be considered for credit for any new entity created as a result of this rule.

Applications for DXCC award credits resulting from this change will be accepted on or after October 1, 2006.



FCC Directs Manassas BPL System to Resolve Amateurs' Interference Complaints

(From the ARRL Letter)

In two strongly worded letters, the FCC's Enforcement Bureau has directed the Manassas, Virginia, BPL system to take appropriate steps to eliminate harmful interference to Amateur Radio operators. Several hams in the Manassas area have complained, some repeatedly, about severe interference from the BPL system, operated by COMTek on the city-owned power grid. The FCC minced no words in detailing what it wants the city and BPL operator COMTek to do to ensure its system complies with Part 15 rules governing BPL systems and even hinted that it may shut down all or part of the system. One of the FCC letters followed up on a complaint from Dwight Agnew, AI4II, of BPL interference to his mobile operations.

FCC Spectrum Enforcement Division Chief Joseph Casey told the city and COMTek June 16 that within 20 days he wants a "detailed report on the actions you have taken and the progress you have made in resolving the interference complaint or

reducing the emissions in the area referenced in Mr Agnew's complaint to 20 dB below the Part 15 limit," a level the FCC maintains generally is sufficient to eliminate BPL interference to mobile operations. Additionally, Casey said the Commission wants to know "the specific steps you will take to inform customers of a cessation of service in the event you are directed to cease operations, either in part or system-wide."

ARRL CEO David Sumner, K1ZZ, said the League is "especially gratified" that the Enforcement Bureau's Spectrum Enforcement Division has ordered the City of Manassas to take steps to prepare for a cessation of BPL services. "Clearly, the FCC has lost patience with COMTek's reliance on misleading news releases as a substitute for meaningful solutions to the ongoing interference," he said.

In an April 7 news release COMTek Vice President Walt Adams called the Manassas BPL system "a real success story" and said its testing showed "an almost identical" level of interference whether or not the system was in operation. It made a similar claim to the FCC in Agnew's case.

COMTek has indicated it expects emissions can be reduced to 20 dB below the Part 15 limit once second-generation BPL equipment is in place along the Virginia Business Route 234 corridor by the end of July. Casey said that's not good enough. "We note that a failure to respond until the end of July to any complaint alleging harmful interference in an effort to determine if the new equipment resolves the matter is not sufficient," he pointed out in a footnote.

Casey said Manassas and COMTek must address and "reach a resolution" with regard to Agnew's interference complaint "as soon as practicable."

Based on the engineering reports the FCC received from the city and COMTek in response to the Agnew complaint, Casey said, "it appears that the BPL system is not in compliance with the Commission's emission requirements at several frequencies," although none were in the amateur bands.

Manassas and COMTek must detail within 30 days steps taken to clean up the system as well as any additional actions necessary for the system to remain in compliance with Commission rules.

In a second letter, Casey requested Manassas and COMTek to examine and address specific longstanding interference complaints from George Tarnovsky, K4GVT; Donald Blasdell, W4HJL; Bill South, N3OH; Jack Cochran, WC4J, and Arthur Whittum, W1CRO. Manassas and COMTek must "take appropriate remedial steps to eliminate any instances of harmful interference" or reduce emissions in the areas cited in the complaints to 20 dB below the Part 15 limit, he instructed. He also reiterated his call for system compliance.

Casey said the FCC wants a report within 30 days on steps taken to address the five radio amateurs' specific interference complaints and eliminate excessive emissions.

Tarnovsky said the complainants are encouraged by the FCC's response to COMTek's reports and are looking forward to the results of the Commission-directed testing.

"I think I can speak for all parties in saying that we're looking forward to a BPL interference-free Manassas," he said.



Post Your Field Day 2006 Photos and Experiences on the Contest Soapbox

(From the ARRL Letter)

ARRL invites participants in ARRL Field Day 2006 to post photos and narratives to its Contest Soapbox <http://www.arrl.org/contests/soapbox/> for all to see. It's not only fun and easy, but your photos and writeup could become part of the annual Field Day summary that appears in December QST.

Several participants have already taken the opportunity to tell their Field Day tales on the ARRL Contest Soapbox, which is open to ARRL members and non-members alike. Narratives should focus on your or your club's or group's involvement in Field Day.

The League reserves the right to edit or even to decline postings it considers inappropriate for this forum. The potential audience for your post is broad, so good taste is a must. Responsibility for

all posted material rests solely with the author, and the ARRL staff assumes no responsibility for errors, omissions or accuracy of items appearing in the Contest Soapbox.

Direct any questions and comments on to the author of the post. If you have questions or comments about using Contest Soapbox, contact the ARRL Contest Branch contests@arrl.org.



Field Day at W1AW Slide Show Available

(From the ARRL Letter)

A slide show, "Field Day at W1AW," now is available on the ARRL Web site <http://www.arrl.org/contests/FD2006-W1AW/>. Photographed and produced during Field Day 2006 by ARRL Web/Software Development Manager Jon Bloom, KE3Z, the 4-1/2 minute presentation "was created to give members a feel for what happens at W1AW on Field Day," he says. It also provides a peek inside W1AW for those who have never visited. "The slide show is presented using Adobe Flash format. Adobe Flash Player 7 or later and a compatible Web browser are needed to play the slide show," he notes, adding that most computers already have a copy of Flash Player installed. If not, Flash Player is a free for download from Adobe http://www.adobe.com/go/gntray_dl_getflashplayer. The show can be played directly from the Web site in either a large format — suitable for broadband Web users — or in a smaller format more attuned to dial-up Internet connections.



ARRL "DXCC Dialog" Blog Debuts

(From the ARRL Letter)

The ARRL DXCC Desk has inaugurated the "DXCC Dialog Weblog" <http://www.arrl.org/blog/DXCC%20Dialog> — containing news and notes about the ARRL DXCC program. "This page will have up-to-date information about the DXCC program," says ARRL Membership Services Manager Wayne Mills,

N7NG. "It does not provide for users to post responses, but authors and e-mail addresses are listed." The blog will be updated as needed to inform and update the DXing community regarding news of interest.



ARRL Propagation Forecast Bulletin

Propagation Forecast Bulletin 26 ARLP026
From Tad Cook, K7RA
Seattle, WA June 30, 2006
To all radio amateurs

It was a fun Field Day weekend all over last week, judging from the Soapbox comments and photos on the ARRL web site at <http://www.arrl.org/contests/soapbox/>. There are many great stories on the site, but I enjoyed reading the N4SL report on the W7MRG operation over 500 miles down the road to Montana from home in Washington State. Go to page 10 (click on 10 at the bottom of the page on the above link) to find it. Even with zero sunspots, the homebrew wire antenna arrays and Montana hilltop sounded fabulous. If you check the N4SL listing on www.qrz.com, you'll see his wire antennas at home sound quite similar to his Field Day setup.

Apparently there was some 6, 10 and 15 meter fun, although your author didn't hear it here. We put in a short casual mobile operation on 20 and 40 meters, both CW and SSB, and were impressed with how well the 7 foot monoband whip on the car worked on 40 meters. Changing bands meant unscrewing an antenna from the trunk mount and substituting another.

No sunspots last weekend, but a big new spot (897) rotated into view this week. Followed by spot 898, it looks like a moderately rising solar flux and sunspot number will be with us through July 6. A solar wind stream caused elevated geomagnetic numbers on June 28 and 29, and this may happen again around July 3-5. Geophysical Institute Prague predicts quiet conditions over June 30 to July 3, quiet to unsettled on July 4, unsettled to active on July 5, and unsettled on July 6.

Last week's bulletin mentioned Carl Luetzelschwab, K9LA and his article "When Will the Bands

Improve?" in the current July 2006 QST. Carl would like to correct his definition of the length of a sunspot cycle. The sentence in question should read "The average length of a sunspot cycle, from solar minimum with a minimum number of sunspots (low electron density) to solar maximum with a maximum number of sunspots (high electron density) and then back down to the next solar minimum, is approximately eleven years."

Roger Laphorn, G3XBM wrote: "I echo the comments last week about 6m being a bundle of fun. I only have 5-10W QRP to a small vertical on the side of the house but this has allowed me to work all across Europe as far as Ukraine on SSB with 59 reports being the norm. Last summer I managed a few north Africans but not yet this summer".

"Not within my reach has been the amazing DX worked from Europe by the 'big guns' running high power to large beams: Central America, North America and, most amazing of all, a number of openings to JA and even one to KL7. JAs seem to have been worked on several mornings of late around our late breakfast time. This is over the pole and a very long way for simply sporadic-E. I wonder what mode this really is?"

Roger has a very nice web page at <http://homepage.ntlworld.com/laphorn/index.htm>. Don't miss the interesting links he has under Homebrew rigs for the remarkable little QRP radios he constructed.

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

For more information concerning radio propagation, see the ARRL Technical Information Service at <http://www.arrl.org/tis/info/propagation.html>. For a detailed explanation of the numbers used in this bulletin, see <http://www.arrl.org/tis/info/k9la-prop.html>. An archive of past propagation bulletins is at <http://www.arrl.org/w1aw/prop/>.

Sunspot numbers for June 22 through 28 were 0, 0, 0, 13, 14, 33 and 38 with a mean of 14. 10.7 cm flux was 72.1, 71.8, 73.6, 74, 76.4, 78.5, and 83.5, with a mean of 75.7. Estimated planetary A indices were 6, 2, 4, 5, 3, 6 and 18 with a mean of 6.3. Estimated mid-latitude A indices were 6, 1, 2, 3, 1, 7 and 12, with a mean of 4.6.



ARRL DX Bulletin

DX Bulletin 25 ARLD025
From ARRL Headquarters
Newington CT June 22, 2006
To all radio amateurs

This week's bulletin was made possible with information provided by SV1CER, YV5AJ, QRZ DX, the OPDX Bulletin, DXNL, 425 DX News, The Daily DX, Contest Corral from QST and the ARRL Contest Calendar and WA7BNM web sites. Thanks to all.

MALDIVES, 8Q. Vangelis, SV2BFN is QRV as 8Q7GE from Lankanfinolhu Island, IOTA AS-013, until July 4. Activity is on 40 to 6 meters, using mostly SSB and RTTY and some CW. QSL direct to home call.

CROATIA, 9A. Zik is QRV as 9A/VE3ZIK from Bilice until July 10. This includes an entry in the upcoming IARU contest. He may try a side trip to Kaprije Island, IOTA EU-170, one day during his trip. QSL via DL3PS.

CANARY ISLANDS, EA8. Steve, G0UIH is QRV as EA8/G0UIH/p from Fuerteventura Island, IOTA AF-004, until July 1. Activity is mainly on 20, 17 and 15 meters using SSB. QSL direct to home call.

PHILIPPINES, DU. Chris, VK3FY and Nik, VK3FNIK are QRV as VK3FY/DU8 until July 5 from a variety of islands. Activity is on all bands using CW and SSB. QSL via VK3FY.

MARQUESAS ISLANDS, FO. Yves is QRV as FO/F6CTL and has been active on 20 meters using SSB between 0000 and 0700z. QSL via F6CTL.

SCOTLAND, GM. Gordon, G3USR will be QRV as GM3USR/p from the islands Hirta and St. Kilda, IOTA EU-059, from June 24 to July 6. Activity is on 40 and 20 meters. QSL to home call.

HONDURAS, HR. Members of the Radio Club de Honduras are QRV as HQ3C from Chachahuat Island, IOTA NA-160, until June 25. Activity is on

160 to 10 meters using CW, SSB and RTTY, if conditions allow it. QSL via HR2RCH.

ITALY, I. Members of Mediterraneo DX Club will be QRV as IG9Z from Lampedusa Island, IOTA AF-019, from June 26 to July 2. QSL via IZ8GBH.

ST. LUCIA, J6. Dave, KC2HO and Lauren, KC2LR will be QRV as J6/homecalls from June 25 to July 4. Activity will be on 40 to 10 meters using CW, SSB and RTTY, mostly during their evening hours. QSL to home calls.

ANTARCTICA. A team of ten operators will be QRV as KC4AAA from the Amundsen-Scott station at the South Pole, IOTA AN-016, during ARRL Field Day. They will primarily be active on 20 meters SSB, but might monitor other bands for openings as well.

POLAND, SP. Special event station HF80GD is QRV until June 30 to celebrate the 80th anniversary of the city of Gdynia. Activity is on all band and modes. QSL via SP2AVE.

GREECE, SV. A group of Greek operators are QRV as J48WT from Samothraki Island, IOTA EU-174, until June 27. QSL via SV2HPP.

ANTIGUA, V2. Nobby, G0VJG is QRV as V25V until July 6. Activity is on all HF bands, using mainly SSB, but he will also try to work Europe on 6 meters and some digital modes. QSL via G4DFI.

BRITISH VIRGIN ISLANDS, VP2V. A group of operators are QRV as VP2V/W7XU until July 2. They have CW and SSB beacons on 50106 and 50118 kHz, respectively. QSL via W7XU.

VENEZUELA, YV. Radio Club Venezolano will be QRV as YW9AJ from Apure State from June 29 to July 5. This includes Venezuela's Independence Day contest. Activity will be on 160 to 6 meters using all modes. They will also be active as YV5SAT/9 on various satellites. QSL YW9AJ via YV5AJ and YV5SAT direct.

ZIMBABWE, Z2. Vlad, UA4WHX is now QRV as Z2/UA4WHX. Activity is on 80 to 10 meters using CW and SSB. His length of stay is unknown. QSL to home call.

MACEDONIA, Z3. Laci, HA1RS and Zoli, HA1CA, will be QRV as Z38R and Z38C, respectively, from Skopje from June 24 to July 14. Activity will be on the HF bands, including 6 meters, and the V/UHF bands as well. QSL both calls via HA1RS.



The Maltese Manager

By Paul Dunphy, VE1DX

One of the Local QRPers came hippity hopping up the hill the other day, this one with a gleam in his eye and a smile on his face. We were happy to see this, for often we have to console the disenchanting ones, or listen to a tale of woe that often defies explanation. The QRPer looked at us and then sat down. "It's over," he said confidently, "it's all over and we can get on with real DXing! What a relief!" We looked down over the village for a few moments, trying to decide how to proceed. We took a deep breath and asked the inevitable question, "What's over?"

"Cycle 23," the QRPer responded without hesitation. "There's no doubt about it. The sunspots are returning and so will the DX! The signs are everywhere. The Flat Days of DXing are over! Cycle 24 has begun." We looked at the QRPer for a moment and then said, "What makes you so sure? The flux hasn't moved in months. Why do you think it's going to start now? We might be in for another year of this." The QRPer looked at us in disbelief: "Aren't you the one who's the eternal optimist, Buster? Now that I have evidence things are going to improve, you doubt me? Why, I was talking to that QSL manager in Malta yesterday on 20 meters. The one who manages the station for Antarctica. He assured me that things were improving. He should know. He says the QSLs he has handled in September and October are only about half the volume of those in June and July."

At this point we were at a complete loss. "What does a decrease in the number of QSLs handled by the Maltese Manager have to do with the solar flux?" we asked, curious to see how the QRPer was going to handle this. "Simple," the QRPer replied, "the propagation has shifted from north-south to east-west. That's a sure sign that the ionospheric conditions have changed. And this guy from Malta says he's been around long enough to

know propagation and DXing. He says that since his station in the Antarctic isn't being worked, it's a sure sign the new cycle has begun. You can't argue with that! And he said he was going to Morocco for the next DX contest. Said that with the beginning of the new cycle, he was sure to win first place in Africa, too! He's going to set up a killer station in Rabat or Casablanca. What do you think of that?"

Son of a Gun! We knew who the manager in Malta was, and we were about as confident in him as Sam Spade had been of the authenticity of Kasper Gutman's falcon! Just as we were about to try and explain this to the QRPer, Sunspot Louie came by and sat down. We got up and got a glass of iced tea for the both of them. We decided to let Louie handle the situation . . . after all, if Sunspot Louie can't explain propagation theory, who could? So we watched as the QRPer told the story to Louie, complete with arm waving, finger pointing and the confidence of the young-and-knowing.

Louie looked at the QRPer intently and then said, "That's absolutely correct! I've been watching the position and behavior of the sunspots these past few months. The folks at the JPL in Pasadena and the NASA scientists are all saying the same thing. The Great Days of DXing are near. I wasn't going to make this public for a few more months, but you've got the inside track from the Maltese Manager. And when he flashes up that station in Morocco, there will be DX for all! Be prepared!" The QRPer leapt to his feet and looked at us with the I-told-you-so grin. "DX IS!" he shouted, as he ran down the hill and off to the DX club meeting to share his newfound knowledge.

We sat there with Sunspot Louie for a few minutes, and then looked over at him. It was clear both of us had been watching too much late-night TV and not tuning the bands enough! Louie's face broke into a broad grin for a split second. Then with a straight face he looked us right in the eye and said, "The stuff dreams are made of." Son of a Gun! What else could we do? We both got up and walked across the yard. We had to say it, "Louie, I think this is the beginning of a beautiful friendship."

Carbon Amateur Radio Club – 2004-2005 Officers

President: Anthony "Goody" Good, K3NG, goody@grpis.org
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Secretary: Brian Eckert, KB3KLJ, kb3klj@ptd.net
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Services

W3HA Repeater: 147.255 MHz + PL 131.8

CARC Website: <http://carc.wb3w.net>, Webmaster: Bob Wiseman, WB3W,
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CARC Email Reflector: <http://mailman.qth.net/mailman/listinfo/carbonarc>

Education Services: <http://www.learnmorsecode.com/cgi-bin/carcnitesurvey.pl>
Contact: Rob Roomberg, KB3BYT, roomberg@ptd.net

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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