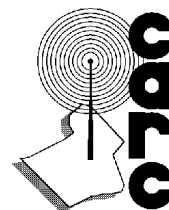




# The Illuminator



The monthly newsletter of the Carbon Amateur Radio Club

April 2004

## April Meeting

The next regular meeting of the Carbon Amateur Radio Club will be held on Thursday, April 15, at 7:30 p.m. at the EMA Center in Nesquehoning. The agenda calls for a brainstorming session regarding ideas for programs for upcoming meetings.

The following ideas are already on the table:

- Traffic Handling
- QSLing
- RACES

Please come to the meeting and express what kinds of programs would interest you most. See you there!



## Treasurer's Report

By John, W3MF

### As of April 1, 2004:

Previous Balance	832.72
Receipts (dues)	120.00
Subtotal	952.72
Disbursements (P. O. Box)	19.00
Final Total	933.72



## Walkathon on April 24

This year's March of Dimes Walkathon is scheduled for Saturday, April 24. The location will be the canal, as last year, with the registration area at the park/square in Weissport. Registration starts at 8 a.m., with the walk starting at 9 a.m. and ending at 11 a.m. The main gate will be unlocked

and there will be three checkpoints. We will need one net control, as usual.

As of this writing, six members have volunteered to help with the communications for this event.

If you would like to help with this event, please contact Goody, K3NG, at [goody@fast.net](mailto:goody@fast.net).



## PaddleFEST 2004 on May 2

There has been a request that the Carbon Amateur Radio Club provide communications for PaddleFEST 2004 at Mauch Chunk Lake Park on Sunday, May 2. Details are still forthcoming.

As of this writing, five members have volunteered to help with the communications for this event.

If you would like to help with this event, please contact Goody, K3NG, at [goody@fast.net](mailto:goody@fast.net).



## FCC Invites Comments on Amateur Radio Restructuring Plans

(From the ARRL Letter)

The FCC is seeking comment on three plans, one from the ARRL, that would reshape the Amateur Service licensing structure. Each Petition for Rule Making responds to World Radiocommunication Conference 2003 actions last summer that made changes to Article 25 of the international Radio Regulations. While differing substantially in some other aspects, the three petitions call for modifications at Amateur Radio's entry level and for a three-tiered license system. One petition goes beyond licensing structure to recommend

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additional changes to amateur testing and HF digital privileges. A fourth petition focuses solely on the Morse requirement. Comments are due by April 24 on all four petitions.

Designated RM-10867, ARRL's petition asks the FCC to create a new entry-level license class — being called "Novice" for now. It would offer limited HF CW/data and phone/image privileges on 80, 40, 15 and 10 meters plus certain VHF and UHF privileges. The League plan also would consolidate Technician, Tech Plus (Technician with Element 1 credit) and General licensees into a new General license that no longer would require a Morse examination. Current Technician and Tech Plus licensees automatically would gain General privileges, and Advanced license holders automatically would be upgraded to Extra without further testing. Applicants for Amateur Extra would still have to pass a 5 WPM Morse code examination, but the General and Extra written exams would stay the same.

A news report "ARRL to Propose New Entry-Level License, Code-Free HF Access," <http://www.arrl.org/news/stories/2004/01/19/1/>, has further details. Frequently asked questions (FAQs) are addressed on the ARRL Web site, <http://www.arrl.org/news/restructuring2/faq.html>.

In a wide-ranging petition designated as RM-10868, an "unincorporated grassroots organization" calling itself the Radio Amateur Foundation (RAF) has asked the FCC to modify the Technician ticket to allow limited HF phone, image, data and CW privileges. HF phone/image privileges would be restricted to portions of the 160, 15 and 10-meter bands.

The group also proposes retaining the 5 WPM Morse requirement for General and Amateur Extra applicants, upgrading Advanced class holders to Extra and Novices to Technician. The Radio Amateur Foundation said it sees no need to change licensing requirements for General or Amateur Extra applicants.

The RAF also wants to scrap existing Amateur Radio question pools and start over from scratch, keeping the question pools out of the public domain and requiring a 10-day waiting period before retesting. In addition, it would permit only Generals and Amateur Extras — or Technicians licensed more than two years — to request vanity call signs.

The RAF has further asked the FCC to permit digital experimentation from 29.0 to 29.3 MHz at bandwidths of up to 15 kHz.

In his two-page petition designated RM-10869, Ronald D. Lowrance, K4SX, calls on the FCC to retain the 5 WPM Morse code requirement for General class applicants and to raise the Morse requirement to 13 WPM for Amateur Extra class applicants. He called Morse code "the most reliable mode of communication" in an emergency. Lowrance would make no change in Technician licensing requirements.

The National Conference of Volunteer Examiner Coordinators (NCVEC) wants the FCC to establish a new "Communicator" entry-level license. Its petition, designated RM-10870, reiterates the NCVEC's call — first made last fall in RM-10787 — to altogether eliminate the Morse code testing requirement.

The NCVEC petition would upgrade all current Novices to Communicator class, all current Technician and Tech Plus (Technician with Element 1 credit) licensees to General and all Advanced class licensees to Amateur Extra without further testing. Once the Morse requirement goes away, the NCVEC said in its filing, "there will be no effective difference between the Technician and General class licenses."

The new Communicator ticket would permit a power limit of 100 W on bands below 24 MHz and 50 W on all frequencies above 24 MHz. Communicator licensees would have to use commercially manufactured equipment (or gear built from a commercial kit). Communicator licensees could operate both voice and digital modes on 80, 40, 15 and 10 meters plus VHF and UHF up to 70 cm.

All three license restructuring plans call for changes to the present HF subbands.

Interested parties may view and comment on these petitions via the FCC Electronic Comment Filing System (ECFS) <http://www.fcc.gov/cgb/ecfs/>. When entering the RM number in the ECFS "Proceeding" field, RM must be in capital letters and the hyphen must be included.



### **FCC Clarifies Docket Number for Future BPL Comments**

(From the ARRL Letter)

The FCC says anyone filing comments on the its Broadband over Power Line (BPL) Notice of Proposed Rulemaking (NPRM) in ET Dockets 03-104 and 04-37 should reference only the latter docket number, not both docket numbers. The ARRL was among those who had asked the FCC to clarify the matter. The deadline to file comments is Monday, May 3. Reply comments are due Tuesday, June 1.

"To simplify this filing process and minimize the burden on both interested parties and the Commission's resources, we are requesting that parties responding to the Notice of Proposed Rule Making submit comments, replies and any other pleadings or information only in the newly established ET Docket No 04-37," the FCC said this week in a public notice. Written comments may be filed via the Electronic Comment Filing System (ECFS) <http://www.fcc.gov/cgb/ecfs/>.

The Commission says that commenters should include their full name, US Postal Service mailing address and ET Docket No 04-37 when completing the transmittal screen. The FCC ECFS Express system <http://gullfoss2.fcc.gov/ecfs/Upload/> also now is accepting brief comments on the BPL proceeding, which is the top item on the list.

For additional information on filing comments, see the FCC public notice [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-04-760A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-04-760A1.doc).



### **Pennsylvania Hams Help Equip Mobile Command Post**

(From the ARRL Letter)

Amateur Radio input has helped to ensure complete interoperability for a new mobile command post in Northeastern Pennsylvania. The fully decked-out communications vehicle based in

Wilkes-Barre is the result of a federal grant and volunteer assistance from three radio amateurs and several other volunteer radio experts, who got keys to the city in return. Armed with a \$300,000 federal grant, Wilkes-Barre Mayor Tom McGroarty wanted to put some of the money toward a mobile command post — or MCP — project. He approached Bill Harding, KA3QPQ, of the city's engineering office. Harding, in turn, sought advice and assistance from Rich Arland, K7SZ. Other team members included Greg Berholtz, N3SFO, David Anthony and Leigh Thompson.

"The plan involved purchasing off-the-shelf communications gear and configuring a mothballed GMC Suburban as a mobile communications asset to support interagency interoperability during emergencies," said Arland. Ham radio operators volunteer emergency communication services to 18 communities in Northeastern Pennsylvania, he noted. After a briefing from Harding, the MCP project manager, regarding Amateur Radio Emergency Service/Radio Amateur Civil Emergency Service (ARES/RACES) operations, Arland said, the mayor wholeheartedly agreed that ham radio definitely should be part of the MCP equation.

"All in all, the van has the capability to communicate on all ham bands from 160 meters through 70 cm on CW, SSB, data and FM," Arland reports. Of course, it also contains a full complement of low and high-band public safety (police, fire and emergency medical services) communications gear. Future plans call for the addition of a high-end GPS unit and a 2-meter transceiver dedicated to APRS. Needless to say, the van literally bristles with antennas — 15 in all — most for VHF and UHF, although there's a screwdriver-type antenna for HF.

So far, the MCP has been sent out twice — to support emergency operations following flooding in Wayne County and to assist after a prisoner escaped from a county lockup.



### **Rodrigues Island 3B9C DXpedition is Colvin Award Grant Recipient**

(From the ARRL Letter)

The Project Star Reach 3B9C DXpedition <http://www.fsdxa.com/3b9c/index.html> to Rodrigues Island (AF-017) hit the bands March 20 and by mid-week was already gaining on the 40,000-QSO mark. Scheduled to continue through Tuesday, April 13, the DXpedition is the recipient of an ARRL Colvin Award.

"This financial award has made an invaluable contribution to the expenses incurred in mounting our major DXpedition," 3B9C Publicity Officer Don Field, G3XTT/NK1G, noted this week. Field said the \$4000 award would go toward the cost of shipping several tons of gear by container from the UK to Rodrigues Island and back. He said 3B9C team members were "delighted" to get the grant.

The Colvin Award was established in 1994 with the proceeds of a life insurance policy purchased by Lloyd Colvin, W6KG, that named the ARRL as beneficiary. The award is conferred in the form of grants in support of Amateur Radio projects that promote international goodwill in the field of DX. From the 1960s into the early 1990s, Lloyd Colvin and his wife Iris, W6QL, activated more than 100 DXCC entities. Lloyd Colvin died in 1993 and Iris Colvin in 1998.

3B9C has been generating lots of activity on all HF bands as well as on 6 meters. Field said the DXpedition wants to extend its reach beyond the usual DX chasers and is using 3B9C as an opportunity for education and training in HF propagation, antennas and new modes. 3B9C on-line logs <http://www.fsdxa.com/3b9c/online-logs.html> are being posted roughly every 24 hours.

The DXpedition is being sponsored by the Five Star DXers Association (FSDXA), with assistance from many others. QSL direct to FSDXA, PO Box 73, Church Stretton, SY6 6WF UK or via the RSGB QSL Bureau. Much more information plus a form to request bureau cards is available on the 3B9C Web page <http://www.fsdxa.com/3b9c/>. — some information via The Daily DX <http://www.dailydx.com>



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## ARRL Propagation Forecast Bulletin

Propagation Forecast Bulletin 14 ARLP014  
From Tad Cook, K7RA  
Seattle, WA April 2, 2004  
To all radio amateurs

The third week of spring begins this weekend. HF conditions have been good, with moderate geomagnetic conditions prevailing. Average daily sunspot numbers for the past week, March 25-31 were up when compared to the previous week, over 31 points to 123.9. Average daily solar flux rose 11 points.

On March 29, the sun showed several spots pointed earthward, including one large spot, 582. The sunspot number on that day was 169, the highest since November 30, when it was 178. Geomagnetic conditions weren't bad on March 29, with the planetary A index at 12 and mid-latitude A index at 9.

Any doubts that the overall decline of this solar cycle is well underway are dashed when examining some recent short-term averages. The first quarter of 2004 just ended, and average solar flux and sunspot numbers for the period are down. From the third quarter of 2002 through the first quarter of 2004, the average daily sunspot numbers were 193.5, 152.7, 120.3, 107.3, 110.2, 99.2 and 72.9. Average daily solar flux values for the same seven quarters were 178.1, 164.2, 134.3, 124.2, 120.8, 137.4 and 111.1.

Scott Craig has a minor bug fix for his Solar Data Plotting Utility. He fixed the leap year problem, and the program contains a data file updated through March 3. Download version 3.13 at <http://www.craigcentral.com/sol.asp>.

Over the next five days solar flux values should stay between 110-115. The planetary A index for April 2-6 is predicted to be 8, 8, 20, 20 and 35. The predicted rise in geomagnetic activity is because of a possible solar wind for Sunday, April 4. Today, April 2, there is a slight chance of the earth's magnetic field being hit by a coronal mass ejection.

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This weekend is the Montana QSO Party. Here are some times when 40, 20, 15 and 10 meters may be open to Montana from various locations. The Montana end of the path in these calculations is in the western part of the state, roughly centered on Helena.

From Japan, 40 meters 0900-1400z, 20 meters 0600-0800 and 1400-1700z, 15 meters 2030-0430z and 10 meters possibly around 2100-0400z.

From Australia, 40 meters 0900-1430z, 20 meters 0800-1500z, 15 meters 1530-1730 and 0500-0730z and 10 meters 2130-0300z.

From New Zealand, 40 meters 0600-1400z, 20 meters 0430-1530z, 15 meters 0300-0700z and 10 meters 2000-0230z.

From Hawaii, 40 meters 0330-1500z, 20 meters open 24 hours, with weakest signals 1000-1300 and 1900-2330z and strongest signals 0500-0800 and 1500-1830z. Check 15 meters 1630-0530z and 10 meters 2000-2300z.

From Dallas, Texas, 40 meters open 24 hours with best signals 0200-1200z and weakest signals 1700-2100z. 20 meters should open 1230-0600z, with signals stronger later in the period. 15 meters should open 1530-0130z, with best bet around 1800-2230z. 10 meters might possibly open 1700-2200z.

From Atlanta, Georgia, 40 meters 2230-1430z, with strongest signals 0200-1130z. Check 20 meters 1130-0630z, with signals stronger later in the period. 15 meters 1400-0400z, 10 meters 1700-2230z, with best chance around 2000-2100z.

From Montreal, Quebec, 40 meters 2300-1330z, strongest 0200-1030z. 20 meters 1200-0600z, stronger later in the period. 15 meters 1530-0200z, best bet around 1830-0000z. 10 meters might possibly open 1500-0100z.

From Germany, 40 meters 0100-0630z, strongest 0200-0530z. Check 20 meters 2100-0000z and 1830-2100z. 15 meters 1830-2100z, possible 10 meter opening 1700-2100z.

From Brazil, 40 meters 0130-1000z, 20 meters 2330-0800z and again around 1130z, 15 meters

1300-0430z, weakest 1500-2000z. 10 meters looks good 1630-2300z.

From Cuba, 40 meters 0100-1200z, 20 meters 1300-0530z (weakest 1600-2030z), 15 meters 1700-0000z and possible 10 meter opening 1800-2030z.

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

Sunspot numbers for March 25 through 31 were 128, 100, 129, 125, 169, 121 and 95 with a mean of 123.9. 10.7 cm flux was 127, 123.8, 127.6, 129, 128.6, 126.7 and 121.2, with a mean of 126.3. Estimated planetary A indices were 8, 11, 14, 17, 12, 12 and 7, with a mean of 11.6.



### ARRL DX Bulletin

DX Bulletin 13 ARLD013  
From ARRL Headquarters  
Newington CT April 1, 2004  
To all radio amateurs

This week's bulletin was made possible with information provided by JE2HCJ, K6CRA, NC1L, QRZ DX, the OPDX Bulletin, The Daily DX, 425DXnews, DXNL, WA7BNM and Contest Corral from QST. Thanks to all.

**TANZANIA, 5H.** Eric, SM1TDE will be QRV as 5H3/SM1TDE from April 4 to 18. Activity will be on HF using mainly CW with some SSB and RTTY. He may make a side trip to Zanzibar, IOTA AF-032, during his second week here. QSL to home call.

**THE GAMBIA, C5.** Jan, PA9JJ is QRV as C56JJ from the Senegambia Beach Hotel in Kololi until April 5. Activity is mainly on 160 and 80 meters and the newer bands. He has been active on 15 meters using RTTY around 1600 to 1900z and 20 meters around 2130z. QSL to home call.

**ANGOLA, D2.** Joao, CT1FBL and Durval, CU3BW are QRV as D2U and D2DB, respectively, from Luanda for the next six months. They are active on

most HF bands during their spare time. QSL both calls via EA7JX.

**HONDURAS, HR.** Gerard is QRV as HR5/F2JD until May 14. Activity is on all bands using CW, SSB and RTTY. QSL via F6AJA.

**MINAMI TORISHIMA, JD1.** Club station JD1YBJ has been QRV on 160 meters around 1100z. QSL via operator's instructions.

**AMERICAN SAMOA, KH8.** KH8/DL1VKE and KH8/DF2SS are QRV until April 10 and are active on all HF bands using CW, SSB and RTTY. QSL both calls via DL2MDZ.

**LUXEMBOURG, LX.** Stations SP5HMK, SP5MBQ, SP5UAF, SQ5IRO, SP6T SP7NJX and SP7VC are active as LX/homecalls from Wiltz until April 6. Activity is on 160 to 2 meters using CW, SSB, RTTY and possibly PSK31 and SSTV. QSL to home calls. They also plan to be QRV as LX5A in the SP DX Contest. QSL via LX bureau.

**SUDAN, ST.** Magid, ST2M has been QRV on 20 meters around 0500 to 0600z. QSL direct.

**BANABA ISLAND, T33.** The international team of over 21 operators will be QRV as T33C from April 4 to 16. Activity will be on all bands and modes. QSL via F5CWU.

**BENIN, TY.** Romano, TY5ZR has been QRV on 20 meters CW between 0630 and 0730z. QSL direct.

**LORD HOWE ISLAND, VK9L.** Skip, JE2HCJ is QRV as VK9LU until April 9. Activity is on 160 to 6 meters using mostly CW. QSL to home call.

**CHAGOS ISLAND, VQ9.** Larry, VQ9LA will try to be QRV on 40 meters running split around 2350z, work schedule permitting. QSL via operator's instructions.

**CHATHAM ISLAND, ZL7.** Franz, DK1II and Dom, DL5EBE will be QRV as ZL2III/7 and ZL7/DL5EBE, respectively, from April 7 to 14. They plan to be active on all bands using mainly CW and SSB with some RTTY and PSK31. They will also be QRV with special callsign ZL7II. QSL via DL5EBE.

**PRINCE EDWARD AND MARION ISLANDS, ZS8.** Look for ZS8MI to be QRV from April 7 to 30. Activity will be on 80 to 10 meters using CW and SSB. QSL direct via ZS6M.

The following operations are approved for DXCC credit: XZ1DA and XZ6ST, from February 23 to March 10, 2004.



### Generally Speaking

By Paul Dunphy, VE1DX

One of the Local QRPers came beating his way up the hill the other day, puffing and sweating as the first signs of early summer took their toll. It really wasn't very warm, but the QRPer looked like he'd spent quite a few hours sitting in front of the rig this winter. We'd seen this before, and once the antenna and tower work began in earnest, he'd be back in shape

He flopped down in the chair beside us, wiped a bit of sweat from his brow, and asked, "What is the best DX rig?" We thought for a moment and then used the old trick of answering a question with a question, "Why do you ask?"

"Because all the Big Guns at the DX club were arguing about it at the meeting last night. One of them has one of those TS-2000 rigs, and he swears nothing can touch it! But another one bought a FT-1000MP over the winter, and he was just as adamant it was the best DX rig. And then this other guy who has 340 or 350 worked said he was happy with his TS-430, and that if you spent any more on a rig, it wouldn't make any difference!"

We nodded and peered over our bifocals at the QRPer with a non-committal look. He took a deep breath and continued on. "Last fall I bought a FT-847. It's a middle-of-the-road rig. And with my 600-watt amp and tri-bander, I worked a lot of DX with it these past six months. Now I'm beginning to wonder. Maybe if I had a \$5000 rig, I'd have worked more DX. And if a lot of DX is good, more must be better. Maybe I should buy an FT-1000MP or an IC-781. What do you think?"

We thought about our FT-101 that was still grinding away after 25 years, and of all the DX we'd worked

with it. Often we'd been tempted by the glossy ads and the new bells and whistles, but we'd stuck to our DX guns. Maybe if we had bought a new rig every few years, we'd have worked more DX. But maybe we wouldn't have, either.

The QRPer was tapping his fingers on the table, waiting for an answer. We took our time, and then replied. "You've heard the Old Timer say that all things are relative, although some more so, right?" The QRPer nodded and replied impatiently, "Yes, yes, I know! He always says that. It's what Albert always said, too. But what's it got to do with buying a new rig? Should I dig into my savings and get one of the new high-end rigs or not?"

We weren't about to advise anyone on how much money to spend on a rig, so we decide to hit him with one of the Eternal Enigmas of DXing. "That's the special theory of DXing the Old Timer kept telling you. You obviously haven't heard of the general theory of DXing, have you?"

"What's that?" he said, standing up and staring at us, "and what does it have to do with buying a new rig?"

We looked at him and replied in a knowledgeable tone, "DXers believe that, generally speaking, he who has the best antenna will work more DX. And generally speaking, he who spends more time in front of the rig will work more DX. And generally speaking, he who has the biggest amp will work more DX. So maybe the general theory of DXing implies he who has the most expensive rig will work the most DX, too. But it never has been proven.

Albert spent years working on a unified DX theory, and he never figured it out."

The QRPer looked confused, and he just stared at us. We stared right back at him, and said, "Generally speaking, however, Albert did prove that he who has the best propagation wins. That is why DX IS!"

He jumped to his feet and bellowed, "What kind of answer is that?" We shrugged as he stomped out the door and down the hill, probably no wiser than he had been a few hours earlier. Someday he would probably understand, but maybe he'd have to go through a half dozen expensive radios before it sunk in.



### Helpful Hints

Computers, televisions, and most other small household electric appliances actually run, not on electricity, but on smoke. We know this because when the smoke escapes, they quit working. **(Thanks, Lamar!)**



### Shallow Thoughts

When sign makers go on strike, is anything written on their signs?



(Thanks to the ARRL Web Site)

### **Carbon Amateur Radio Club – 2003-2004 Officers**

President: Anthony “Goody” Good, K3NG, goody@fast.net  
Vice President: Rob Roomberg, KB3BYT, roomberg@ptd.net  
Secretary: Darryl Gibson, N2DIY, n2diy@losch.net  
Treasurer: John Schreibermaier, W3MF, w3mf@ptd.net  
W3HA Callsign Trustee: John Bednar, K3CT, k3ct@fast.net  
W3HA Repeater Trustee: John Bednar, K3CT, k3ct@fast.net  
Public Information Officer: Lisa Kelley, ldkelley@voicenet.com

### **Directors**

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

### **ARES/RACES Committee**

Bruce Fritz, KB3DZN (DC), bruce56@ptd.net  
Darryl Gibson, N2DIY, n2diy@losch.net  
Todd Deem, KB3IKX, kb3ikx@localnet.com

### **Services**

W3HA Repeater: 147.255 MHz + PL 131.8

CARC Website: <http://www.learnmorsecode.com/carc/>  
Webmaster: Rob, KB3BYT roomberg@ptd.net

CARC Email Reflector: see [www.qth.net](http://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  
P. O. Box 166  
Kresgeville, PA 18333-0166