The Illuminator

The monthly newsletter of the Carbon Amateur Radio Club

September 2004

September Meeting

The next regular meeting of the Carbon Amateur Radio Club will be on Thursday, September 16, at 7:30 p.m. at the EMA Center in Nesquehoning.

Our guest speaker for the evening is George Wieland III, N3SQD, and his subject will be "Choosing, Using, and Abusing Batteries." George will compare alkaline, NiCd, NiMH, lead acid, and lithium batteries, as well as describing the do's and don'ts of battery care. You won't want to miss this talk!

See you at the meeting!

New CARC Officers

At the August meeting, the following were elected as officers for the 2004-2005 year:

President — Anthony "Goody" Good, K3NG
Vice-President — Rob Roomberg, KB3BYT
Secretary — Brian Eckert, KB3KLJ
Treasurer — John Schreibmaier, W3MF
At-large Director — Bob Wiseman, WB3W

The other At-large Directors, Bob Culp, KB3IDV, and Bill Kelley, KA3UKL, will continue to serve the remainder of their 3-year terms.

Congratulations to all the new officers!

Treasurer's Report

By John, W3MF

As of the August Meeting:

Previous Balance (From July Meeting)	811.63
Receipts (dues)	20.00
Subtotal	831.63
Disbursements (newsletter)	5.18
Final Total	826.45

ARRL Seeks Comment on Draft "Bandwidth" Petition

(From the ARRL Letter)

The ARRL wants members' comments on a planned petition to the FCC seeking to regulate amateur subbands by bandwidth rather than by mode. The ARRL Board of Directors adopted the petition's guiding principle — to create a regulatory environment more accommodating to newer technologies — two years ago, and it wrapped up its review of a draft petition in late July.

"The main objective is to make appropriate provision for digital modes in the HF amateur bands, while preserving amateurs' prerogatives to use the traditional modes," said ARRL CEO David Sumner, K1ZZ. "Regulation by Bandwidth" is the title of Sumner's "It Seems to Us . . ." editorial in September QST.

The draft petition represents expert input from the ARRL Ad Hoc HF Digital Committee. ARRL staff also provided an interim report, and the Board reviewed a draft petition when it met last January. An ARRL Executive Committee review followed. The EC decided to make a synopsis and explanation of the petition available to ARRL members before it goes to the FCC.

"The regulation of emission modes in Amateur Radio Service allocations is a limiting factor with respect to Amateur Radio experimentation," the

petition synopsis concludes. "It leads to attempts to put new technology into a regulatory framework that was designed only to deal with older analog emissions." To implement digital technologies, an underlying assumption of the League's draft petition is to provide for an intermediate bandwidth — between what's needed for the legacy CW and phone modes — in the middle of certain bands.

As drafted, the ARRL's bandwidth petition would preserve double-sideband AM unchanged, but it would stop short of opening the phone bands to digital and other modes of the same bandwidth.

FCC rules now permit RTTY and data emissions throughout the HF CW subbands, although informal agreements typically keep RTTY and data signals out of those parts of the CW band generally used for CW. The ARRL's petition proposes to limit bandwidth in the CW subbands to 200 Hz, which also will accommodate data modes such as PSK31.

In addition, the League's proposal would limit bandwidth in the existing "RTTY/data subbands" to either 500 Hz or 3 kHz, with phone emissions specifically prohibited in certain subbands where 3 kHz would be permitted. Under the proposal, these would include 3650-3725, 7100-7125, 14,100-14,150 and 21,150-21,200 kHz.

"The reason for this is to encourage the development of higher-speed data communications in these subbands by preventing them from becoming de facto 'expanded phone bands.'" Sumner explained.

The new proposals take into account the ARRL's prior "Novice refarming" petition to expand some HF phone bands, included in the FCC Notice of Proposed Rule Making in WT Docket 04-140.

Amateurs typically won't have to be able to measure the bandwidth of their signals, Sumner says, since the bandwidths proposed are more than sufficient for "clean" signals using traditional HF modes.

The ARRL proposal would eliminate bandwidth restrictions in the 222-225 MHz band — beyond a requirement to keep signals confined within the band.

Sumner encouraged ARRL members to review the synopsis of the petition and the specific rule changes the League plans to propose http://www.arrl.org/announce/bandwidth.html. Direct questions or comments — favorable or otherwise — via e-mail bandwidth@arrl.org. ARRL staff members will respond to any questions, while comments will be forwarded to your ARRL division director. Members also are welcome to comment directly to their ARRL directors http://www.arrl.org/divisions/, also listed on page 15 in QST.



ARRL to Participate in National Preparedness Month

(From the ARRL Letter)

During September, the ARRL will be among dozens of organizations and agencies participating in National Preparedness Month. "The Ready Campaign," produced by the Ad Council in partnership with the US Department of Homeland Security (DHS), is aimed at making citizen preparedness "a priority for every city, every neighborhood and every home" in the US. The League is an official affiliate of Citizen Corps, a DHS initiative to enhance public preparedness and safety. ARRL will combine its role in National Preparedness Month — which starts September 9 — with its own "Amateur Radio Awareness Day" on September 18.

"The two events offer great opportunities for Amateur Radio to showcase its valued service to the nation," said ARRL Field and Educational Services Manager Rosalie White, K1STO. She encouraged ARRL-affiliated clubs and Field Organization volunteers to use the occasion to set up public demonstrations of Amateur Radio and to present or even demonstrate — under the banner of National Preparedness Month — the free services Amateur Radio provides to communities.

ARRL Club/Mentor Program Manager Norm Fusaro, W3IZ, suggests that while displays should be informative, they also need to be neat and simple. "This is also an excellent opportunity to recruit prospective hams for licensing classes that clubs may be forming for the fall," he added. In addition, ARRL encourages all Amateur Radio

operators to have a family emergency communication plan in place in case of an emergency, such as a severe weather event. "Get Ready Now" brochures are available. Visit the Ready.gov Web site http://www.ready.gov for more information.

On Amateur Radio Awareness Day, September 18, W1AW/90 will be on the air from 10 AM until 10 PM Eastern Time with ARRL staff members, new Section Managers in town for the annual Section Managers' Workshop and volunteers from the Newington Amateur Radio League as operators. White encourages amateur groups to invite public officials, representatives of served agencies and first responders to visit their public displays to discuss plans for their Simulated Emergency Test (SET), typically in early October, or other drills.

Some clubs already have jumped on the National Preparedness Month/Amateur Radio Awareness Day bandwagon, Fusaro notes — in some cases by taking advantage of already scheduled events during September.

The Middletown Amateur Radio Club — W2MAR — in New Jersey will take part in Middletown Day activities September 18 with a public ham radio display, information table, traffic handling and ARES/RACES displays. The club expects some 3000 visitors in town, including state and local officials.

In Illinois, Amateur Radio Awareness Day falls on the same weekend as the three-day Peoria Superfest 2004 Amateur Radio and computer show. The Peoria Area Amateur Radio Club will have an all-day demonstration at the Exposition Garden Fairgrounds on September.

The Space Park Employees Association Amateur Radio Club (W6TRW) in Redondo Beach, California, will have its emergency communications team (ECT) van at the Northrop Grumman Space Technology open house September 18.

The ARRL has printed materials available for ARRL-affiliated clubs, ARES groups and others to use for public exhibits and ham radio demonstrations. Brochures may be downloaded free of charge from the ARRL Web site http://www.arrl.org/htdig/?method+and&words=brochure. For a small shipping fee, exhibit kits also are available. Contact Linda Mullally, KB1HSV, lmullally@arrl.org to order.

The League also offers a sample news release http://www.arrl.org/pio/handbook/sample-news-release.html that clubs and groups can customize to help spread the word. More information about National Preparedness Month or Amateur Radio demonstrations in general is available from ARRL clubs@arrl.org.



Amateur Community Invited to Celebrate Maxim Birthday Anniversary

(From the ARRL Letter)

Members of the amateur community are invited to help celebrate the 135th birthday anniversary of the League's co-founder and first president Hiram Percy Maxim, W1AW, who was born September 2, 1869. ARRL Life Members and the League's extended family of elected and appointed volunteers and officials are eligible to identify by appending /135 to their call signs. The complete eligibility list http://www.arrl.org/qst/2004/09/field-positions-135.html (or see Sep QST, p 40) also includes ARRL Headquarters staff members as well as past and present ARRL directors, presidents, vice presidents and honorary vice presidents.

Maxim Memorial Station W1AW will be on the air for the 135th birthday anniversary event. While W1AW has been appending "/90" to its call sign to mark the ARRL's 90th anniversary, it will go with the /135 identifier during the birthday celebration period.

The object of the 10-day event is to work as many HPM/135 stations as you can. Putting at least 25 in the log will make you eligible for an attractive certificate, designed especially for this occasion and endorsable in increments of 25 contacts up to a maximum of 100 (but don't stop there).

The HPM/135 event begins at 0000 UTC on Thursday, September 2, and concludes at 2400 UTC on Sunday, September 12. Stations may be contacted for credit on any band or mode — including repeaters. HPM/135 stations transmit

signal report, appointment (or position) and name. All others transmit signal report and name.

To obtain a certificate, submit a log extract including date, time, band, call sign worked and exchange for each /135 contact. HPM/135 stations are eligible for certificates too. Include your name, call sign and address and indicate how many HPM/135 stations you worked.

Entries go to HPM/135 Celebration, c/o W1AW, 225 Main St, Newington, CT 06111-1494. Entries may be submitted on a floppy disk or CD in text format. Include a check or money order for US$5, payable to ARRL. Entries must be postmarked by October 16, 2004.



Well-known QRPer Bruce Muscolino, W6TOY, SK

(From the ARRL Letter)

Bruce J. Muscolino, W6TOY, of Silver Spring, Maryland, died August 20. He was 64. First licensed in 1956 as K8BAL and well-known within the low-power operating (QRP) community, Muscolino was one of the founders in 1996 of the popular "Four Days in May" (FDIM) QRP convention and symposium sponsored by the QRP Amateur Radio Club International (QRP ARCI) each spring to coincide with Dayton Hamvention. He also was the first QRP contributing editor to the ARRL Web site. "QRP with W6TOY" ran for a year in 1999 and 2000. In its first installment Muscolino maintained that QRP was just part of the bigger picture of ham radio.

"I don't see QRP as special, just another fun mode; however, it really makes you use the best parts of your equipment," he wrote.

One legacy of Muscolino's Web column is the QRP Kit Matrix http://www.arrl.org/news/features/1999/11/15/1/qrpkits.pdf he developed to offer readers a snapshot view of the equipment available to low-power enthusiasts. He also authored a couple of antenna articles in QST and was a regular contributor to the QRP ARCI's QRP Quarterly. Unfortunately, chronic health problems often curtailed his ability to enjoy Amateur Radio and to attend hamfests and conventions.

An ARRL Life Member, Muscolino played a significant role in the revival of the Tuna Tin 2 QRP transmitter. After ARRL Laboratory Manager Ed Hare, W1RFI, had located the original Tuna Tin 2 built by the late Doug DeMaw, W1CER (later W1FB), at a hamfest, he called on Muscolino to restore it "to its former glory," as W6TOY put it in his Web column.

Members of the QRP community — including some who had only corresponded with Muscolino via the QRP reflector and had never met him — this week offered words of praise.

"He was always very helpful to me and graciously offered his knowledge and experience on a number of issues," said Ken Hoglund, KG4FGC, in a message to the QRP reflector. Hoglund suggested that friends remember W6TOY by making a memorial contribution to an ARRL fund http://www.arrl.org/development/memorial.html.

Curt Milton, WB8YYY, who met Muscolino when he did a QRP presentation at a Maryland hamfest, praised Muscolino's enthusiastic make-do approach. "He also frequently reminded us, as a QRP subculture, not to distance ourselves from other amateurs," Milton said.

Denny Payton, N9JXY, called W6TOY "a voice of experience who was always there and always willing to help."

Well-known Cuban amateur Arnie Coro, CO2KK, said Muscolino several times mailed him information on how to build low-cost QRP gear, carefully limiting the required parts to what was available in Cuba. Coro said W6TOY helped many QRP newcomers.

A service was held August 26 in Rockville, Maryland.

The QRP ARCI will hold the QRP SK Memorial Sprint http://2hams.net/ARCI/Memorial Sprint.htm Saturday, September 4, from 1800 to 2100 UTC, CW only. The event will celebrate and honor "the QRP luminaries who no longer answer CQs," the club's announcement said.

ARRL Propagation Forecast Bulletin

Propagation Forecast Bulletin 36 ARLP036
From Tad Cook, K7RA
Seattle, WA September 3, 2004
To all radio amateurs

Thanks so much to Carl Luetzelschwab, K9LA who did a wonderful job filling in and writing the bulletin last week. It was an excellent piece, and you can read it in the archives of all our propagation bulletins on the ARRL web site at, http://www.arrl.org/w1aw/prop/.

Sunspot numbers and solar flux values declined this week compared to last. The average daily sunspot number dropped by nearly 50 to 27.7 and the average daily solar flux was down over 23 points. Geomagnetic activity increased on August 30 and 31. A moderate solar wind stream sparked this.

Returning sunspot 649 has begun a transit across the solar surface. It has shrunk in size, but, along with returning sunspot 656, is expected to increase sunspot numbers and solar flux over the near term.

Solar flux is rising, and the predicted values for Friday through Monday, September 3-6 are 100, 105, 110 and 115. Solar flux is expected to peak around 130 on September 9. The planetary A index predicted over September 3-6 is 15, 10, 10, and 10. The planetary A index may rise higher around September 5 due to a solar wind stream from a coronal hole, possibly producing unsettled to active geomagnetic conditions.

The rising flux and sunspot numbers this weekend should be good news for the All Asian DX Phone Contest this weekend, especially if geomagnetic activity is quiet.

The days are getting shorter as the earth moves toward the Autumnal Equinox on September 22. The long days in the far northern latitudes are receding, so when there is geomagnetic activity, auroras are more visible up north at nighttime. The start of Fall is a great time for HF propagation, even past the peak of the cycle.

Just as we did a month ago, we should now look at the latest monthly averages for daily sunspot numbers and solar flux, and compare them with data from the past year. August's average daily sunspot number was 69.6, and the average daily solar flux was 110. The monthly averages show the steady decline of solar cycle 23.

The monthly average of daily sunspot numbers, October 2003 through August 2004 were 118.9, 103.0, 75.7, 62.3, 75.6, 81.0, 59.3, 77.3, 77.0, 87.8 and 69.6.

The monthly averages of solar flux for the same period were 155.5, 140.8, 116.1, 114.1, 107.0, 112.1, 101.2, 99.8, 97.4, 119.8 and 110.0.

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 August 26 through September 1 were 44, 33, 28, 36, 30, 11 and 12 with a mean of 27.7. 10.7 cm flux was 97.5, 90.5, 87.2, 86.1, 89.9, 88.1 and 89.9, with a mean of 89.9. Estimated planetary A indices were 7, 8, 12, 8, 34, 28 and 9, with a mean of 15.1. Estimated mid-latitude A indices were 4, 4, 6, 5, 27, 14 and 5, with a mean of 9.3.

ARRL DX Bulletin

DX Bulletin 35 ARLD035
From ARRL Headquarters
Newington CT September 2, 2004
To all radio amateurs

This week's bulletin was made possible with information provided by DJ7ZG, F5ASD, G4IRN, NC1L, SM5SIC, the OPDX Bulletin, The Daily DX, 425DXnews, DXNL, WA7BNM and Contest Corral from QST. Thanks to all.

SWAZILAND, 3DA. John, G4IRN will be QRV as 3DA0RN from September 3 to 13. He plans activity on 80 to 10 meters, and possibly 160 meters, using mostly CW with some SSB. QSL to home call.

MALAWI, 7Q. Harry, G0JMU is QRV as 7Q7HB and plans to remain here until the end of November. QSL direct via G0IAS.

FRANCE, F. To commemorate the 90th anniversary of the Battle of the Marne River, look for TM5BDM to be QRV September 4 and 5. Activity will be on 80 to 10 meters. QSL via F5ASD.

ISLE OF MAN, GD. Members of the Wrexham and District Amateur Radio Society are QRV until September 8 as GB4IOM and GB4SPT from a coast guard observation tower at Scarlett Point. QSL via bureau.

SCOTLAND, GM. G3ZAY, M0BLF, M0TDG, M0NKI and M3OXY plan to be QRV as GM6UW/p from the Outer Hebrides, IOTA EU-010, from September 6 to 10. Weather permitting, they also plan to operate, during daylight hours only, from the Monach Islands, IOTA EU-111, on either September 6 or 7. QSL via M0BLF.

NORWAY, LA. Members of the Skandinavisk Radio Club will be QRV as LA3SRK/p from Hitra Island, IOTA EU-036, from September 4 to 5. Activity will be on 160 to 10 meters using CW, SSB, RTTY and PSK. They will be 5 to 10 kHz below the usual IOTA frequencies. QSL via SM5SIC.

ANTARCTICA. LU1ZD is QRV from General San Martin Base, located on Barry Island, IOTA AN-016, in Marguerite Bay. Meanwhile, LU4ZS is QRV from Vicecomodoro Gustavo A. Marambio, located on Seymour Island, IOTA AN-013. Both stations have been active on the 20-meter Antarctic Net beginning around 1900z during the weekends.

BELGIUM, ON. Zelzate members are QRV as ON60Z until November 30 to celebrate the 60th anniversary of the liberation of this region during World War II. QSL via ON7ZT.

SOUTH SHETLANDS. Alex, R1ANF has been QRV using RTTY on 20 meters around 2000 and 2300z. QSL via RK1PWA.

ANTARCTICA. Alexei, UA1PAC will be QRV as R1ANC while wintering at the Russian Base Vostok. He is responsible for running the ionospheric stations. QSL via DL5EBE.

BOSNIA AND HERZEGOVINA, T9. Babs, DL7AFS, Lot, DJ7ZG and Chris, Z31GX are QRV as T98LBC until September 12. Activity will be on 160 to 6 meters using CW, SSB, RTTY and PSK31. QSL via DL7AFS.

CHAD, TT. Francois, F6GYV is now QRV as TT8FT and will be active for one year. QSL to home call.

CHAGOS ISLANDS, VQ9. Larry, VQ9LA has been QRV on 80 meters around 1300z. QSL via operator's instructions.

VANUATU, YJ. Clark, YJ0XX has been QRV on 30 meters around 1000 to 1200z. QSL via W6YOO.

DXCC Deadline Change. Beginning in September 2004, there will no longer be a deadline for the DXCC Annual List. The lists of DXCC standings previously published in the DXCC Yearbook will be replaced by complete lists on the ARRL Web site. Further details can be found on the web at, http://www.arrl.org/awards/dxcc/.



The Pot-Stirrer

By Paul Dunphy, VE1DX

One of the local QRPers came around the curve at the bottom of the hill and just stood there, looking up the hill. As we may have mentioned before, living on a hillside has its advantages... but it also has its disadvantages. The disadvantage this morning was we couldn't quite make out the expression on the QRPers face. Usually they plough right on up and its possible to get a look at their expression. This often helps in making the decision whether to get out the ice tea or bar the doors and take the phone off the hook.

The QRPer stood there, hands on his hips for a full five minutes and then, just as we were distracted by the squawk of the 2-meter spotting repeater, he made his move... beating his way up the hill, full stride. By the time we had turned back to look his way, eye contact had been made and we were

trapped. Not that this was necessarily a bad thing, but our option of locking the door and going into hiding had been lost. The QRPer made it to the veranda and stood looking at us with a pensive stare. In hindsight, even had we studied him with binoculars while he was down on the road, we wouldn't have been able to read a lot from his expression.

The QRPer just sat there and stared and stared. We'd never seen anything like it! This one, in particular, always had something to say... he'd always had an opinion on everything DX related. There was cause for concern. "What's up?" we finally asked, for even after all these years we too could be worn down. He just looked at us and continued to stare. We were becoming concerned. Something must have rocked the foundations of the DX world. This was serious. We tried again. "How are the bands?" Nothing. We gave it a final shot; "The ARRL has put the DXCC listings back in QST, right?" The QRPer just looked at us with a blank stare.

Son of a Gun! Ever since the Early Days of DXing, there never had been a QRPer so stoic. So we hauled him up to the Old Timer. This time there was no stream of words and no arm waving and pounding of fists to drive the point home. QRPers always find some concern about DX or, more commonly, a newly perceived flaw in the DXCC program they thought they had found. The Old Timer looked over at the QRPer for a moment, and then back at us. "What's wrong with him?" we asked in a truly concerned tone. "Nothing," the Old Timer replied, "it happens every few years. Usually with one of the newly minted QRPers like this one. They can't understand the confusion, so they seize up for a few days. He'll be OK by New Years."

We thought about it for a few minutes. "Of course!" we replied, smacking ourselves in the forehead as it became clear. "This is the first time he's seen the Pot-Stirrer in action. The Pot-Stirrer was Slim's cousin and he was more active than Slim, but usually he got ignored. The Pot-Stirrer rarely worked HF, and more recently had been showing up on the Internet. "It's the FT5 Pot-Stirrer, isn't it?"

The Old Timer nodded in agreement. "Yep... and he did a real good job. One whine and he had a couple of hundred bites. Even a few of the Big Guns bit this time. And when a newly minted QRPer sees all these guys sling the DX muck at each other for the first time, they often end up forgetting that DX IS! They become disillusioned with DX and DXers. A few give up altogether. And while Slim just steals your QSO, and maybe your green stamp, a Pot-Stirrer and the Legion of Hand Wringers that listen to him steal DXers from the hobby. That's the way it's always been and that's the way it always will be. But this fellow, he won't quit. He still understands that DXers are a cut above the rest. And while this is a learning process for him, he'll be back. He has to... look at the bands. There's DX for all! The Great Days of DXing have returned!"

We thought about this as we led the QRPer back down the hill. The Palos Verdes Sundancers had worked four long years to bring the flux back up. The Old Timer was right. There is DX for all, although for some more than others. We wondered if the Pot-Stirrer was a DXer or not. We still wonder. It's a good question. Meanwhile, DX IS!



Helpful Hints

Putting just the right amount of gin in your goldfish bowl makes the fishes' eyes bulge and causes them to swim in an amusing manner.



Shallow Thoughts

Instead of talking to your plants, if you yelled at them, would they still grow, only to be troubled and insecure?

Carbon Amateur Radio Club – 2004-2005 Officers

President: Anthony "Goody" Good, K3NG, goody@fast.net
Vice President: Rob Roomberg, KB3BYT, roomberg@ptd.net
Secretary: Brian Eckert, KB3KLJ, eckertb@ptd.net
Treasurer: John Schreibmaier, W3MF, w3mf@ptd.net
W3HA Callsign Trustee: John Bednar, K3CT, k3ct@fast.net
W3HA Repeater Trustee: John Bednar, K3CT, k3ct@fast.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:/www.learnmorsecode.com/carc/
Webmaster: Rob, KB3BYT roomberg@ptd.net

CARC Email Reflector: see www.qth.net CarbonARC list for details

Emergency Power Equipment Trustees: Lisa and Bill Kelley, KA3UKL, ldkelley@voicenet.com

CARC Membership Information

Regular Membership is $15.00, which includes autopatch privileges.

All amateur radio operators are invited to join the CARC ARES / RACES net held 21:00 local time every Wednesday on the W3HA repeater at 147.255 MHz + offset, PL 131.8. Any amateur radio operator or anyone with an interest in ham radio is welcome to attend our monthly meetings which occur the third Thursday of each month at 7:30 PM at the Carbon County EMA Center on Route 93 in Nesquehoning.

Carbon Amateur Radio Club
c/o Bob Schreibmaier K3PH
P. O. Box 166
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