



The Illuminator



The monthly newsletter of the Carbon Amateur Radio Club

August 2003

August Meeting

The next regular meeting of the Carbon Amateur Radio Club will be held on Thursday, August 21, at 7:30 p.m. at the EOC in Nesquehoning. This month's meeting features election of officers for the upcoming year.

The following have been nominated for office:

President — Goody, K3NG
Vice-President — Rob, KB3BYT
Secretary — Darryl, N2DIY
Treasurer — John, W3MF
At-large Director — Bill, KA3UKL

Should Bill be elected, Lisa Kelley will take over the position of Public Information Officer.

Of course, nominations also will be open at the August meeting.

See you there!



Treasurer's Report

By John, W3MF

Previous Balance	1235.86
Receipts (dues)	55.00
Subtotal	1290.86
Disbursements (batteries)	75.00
(newsletter)	6.66
Final Total	1209.20



Carbon ARC Picnic

The Carbon Amateur Radio Club plans to have its annual picnic on Sunday, September 14, at noon at the Beltzville State Park. Details will undoubtedly be discussed at the August meeting. See you there!



ARRL Board Requests Policy Recommendations to Implement WRC-03 Results

(From the ARRL Letter)

The ARRL Board of Directors has called on ARRL Chief Executive Officer David Sumner, K1ZZ, General Counsel Chris Imlay, W3KD, and the ARRL Executive Committee to develop ARRL policy recommendations for an FCC filing to implement the results of World Radiocommunication Conference 2003 (WRC-03) in the amateur rules. ARRL President Jim Haynie, W5JBP, chaired the July 18-19 Board session in Windsor, Connecticut.

"The League, as the Amateur Radio representative in the United States, will, through its democratic process, review input from its members as to the impact and implementation of these results to the Part 97 rules," a Board resolution declared. A report on the policy recommendations is due next January. The Board expressed gratitude to the IARU and ARRL WRC-03 team for its "tireless and dedicated efforts in promoting Amateur Radio" and congratulated it for achieving the IARU's goals at the month-long international conference, which wrapped up in Geneva July 4.

Delegates to WRC-03 reached a compromise on a 200-kHz worldwide allocation — 7000 to 7200 kHz — effective in 2009, with no change to the existing 300-kHz allocation in the US or elsewhere in Region 2. The conference also eliminated the

requirement that amateur applicants prove Morse code proficiency to operate below 30 MHz, leaving it up to individual administrations to retain or drop Morse as an exam element. WRC-03 decisions also resulted in changes affecting international third-party traffic, guidelines for standards of competence of amateur licensees, and recognition of the licenses of visiting amateurs.

The Board also implemented some recommendations of the wide-ranging Final Report of the Volunteer Resources Committee to the ARRL Board of Directors — an Evaluation of the ARRL's Field Organization. The committee, chaired by ARRL Midwest Division Director Wade Walstrom, W0EJ, concluded that the state of the ARRL Field Organization is "fair," but not sufficient to meet the League's obligation to provide emergency communications, especially at the national level.

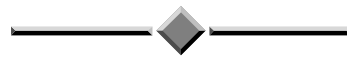
In light of the report, the Board called for a comprehensive system to enhance the communications capabilities of the Amateur Radio Emergency Service (ARES). There are situations, the Board said — especially given the League's new Citizen Corps partnership with the Department of Homeland Security — when ARES "must have the capability to pass traffic across the nation quickly and accurately."

The Board also called on all Section Emergency Coordinators to develop, implement and maintain a comprehensive Section Emergency Plan by year's end. Additionally, the Board asked Sumner to formally establish leadership training courses as a part of routine Section Manager orientation.

In response to the so-called "Minute 56" report initiated at last July's meeting, the Board voted to initiate a process to revise ARRL band plans for amateur allocations between 902 MHz and 24.25 GHz. "New band plans will be developed using as a goal the full amateur deployment of each band," the Board said. The Board voted unanimously to authorize President Haynie — with assistance from Imlay and Technical Relations Manager Paul Rinaldo, W4RI, "to explore specific terms of expanded partnering plans with the National Public Safety Telecommunications Council (NPSTC). Such cooperation could involve greater integration of amateur operation in the bands from 902 MHz to 24.25 GHz in public safety and homeland security communications."

Citing the Amateur Radio tradition of Elmering (mentoring) new and prospective amateurs, the Board okayed a resolution instructing the VRC to develop two or more viable options for an ARRL Volunteer Mentor program that would provide for "the promotion, support and growth of mentoring in Amateur Radio." The VRC is to present its options at the Board's January meeting.

Additional details are on the ARRL Web site. The minutes of the July ARRL Board of Directors meeting will be posted on the ARRL Web site.



What to Do About the Morse Requirement Post-WRC-03?

(From the ARRL Letter)

World Radiocommunication Conference 2003 (WRC-03) made optional the requirement to prove the ability to send and receive Morse code to operate below 30 MHz. While Morse exam elements remain on the books in the US, Canada and elsewhere, Switzerland and the United Kingdom have apparently become the first countries to delete their Morse requirements for HF operation. In the US, however, the FCC is unlikely to act on its own motion to simply make the Morse testing requirement go away.

"There isn't an exception in the Administrative Procedures Act that I am aware of that would permit the Commission to issue an administrative fiat changing the license structure or exam-requirement rules," said an FCC staffer who's closely involved with Amateur Service rules. Other countries can do this because they have different laws and procedures, the FCC staff member observed, adding that even if it could be done here, "that still leaves unanswered the fundamental question: What do you want the new rules to be?"

In its December 1999 Report and Order restructuring Amateur Radio licensing, the FCC stopped short of revising the rules to sunset the Morse requirement automatically if WRC-03 deleted Morse proficiency from the international Radio Regulations. The FCC also acknowledged "a clear dichotomy of viewpoints" on the Morse code issue within the amateur community.

The ARRL's policy for several years has been that Morse should be retained as a testing element in the US. At its July 18-19 meeting in Connecticut, however, the Board said it would solicit and review input from members on the Morse testing requirement and other possible revisions to Part 97 arising from WRC-03.

The first move on the Morse code question in the US is for someone to file a Petition for Rule Making with the FCC seeking a rule change. No Code International (NCI) <<http://www.nocode.org>> has spearheaded the battle to eliminate the Morse requirement and would be a likely organization to file such a petition. NCI Executive Director Carl Stevenson, WK3C, said late last week that NCI was still studying the matter and had not yet made a final decision on a plan of action. An ARRL member, Stevenson says he hopes personally that the League would join NCI in actively encouraging the FCC to eliminate the Morse exam element as soon as possible.

Hopes for a quick resolution to the Morse question could be wishful thinking, however. Once a petition to drop the Morse exam element is filed, the FCC will put it on "public notice" by assigning an RM number and soliciting comments. If more than one such petition is filed, the FCC is obliged to invite comments on each. When that process is completed, the FCC may determine that a Notice of Proposed Rule Making (NPRM) is in order. The Commission at that point could incorporate all Morse-related rule making petitions into a single proceeding. The NPRM would get a docket number, and the comment process would begin anew.

Further complicating and extending the process, the FCC most likely would incorporate other pending Amateur Radio-related issues into the same NPRM. At the end of the comment and reply comment periods, the FCC would issue a Report and Order (R&O) that includes its decision on the Morse code requirement and any other issues incorporated into the proceeding. The whole process could take a couple of years, perhaps longer.

Ratification of the WRC-03 Final Acts by the US Senate does not appear to be necessary before the FCC can act or begin the rule making process. Following World Administrative Conference 1979

(WARC-79) which resulted in three new HF amateur bands, the FCC acted in 1982, prior to Senate ratification of the conference's Final Acts, not only to initiate the rule making process but to give amateurs limited access to 30 meters.

Radio Amateurs of Canada has advised hams in that country that the Morse qualification requirement remains in effect for operation below 30 MHz, "pending a review by Industry Canada of the impact of the WRC-2003 regulatory changes on the Canadian radio regulations, policies and procedures."



ARRL Urges Improved RFI Immunity Standards for Consumer Electronics

(From the ARRL Letter)

The ARRL has told the FCC that improved interference standards for consumer electronic devices is the most pressing need as the Commission considers the interference immunity performance of receivers. The League this week filed comments in response to an FCC Notice of Inquiry (NOI), "Interference Immunity Performance Specifications for Radio Receivers" (ET-03-65), released last March to gather input on the issue. While recommending "either mandatory receiver immunity standards or at least guidelines" in most other services, the ARRL said no receiver immunity standards are necessary or practical in the "essentially experimental" Amateur Service.

"The real need for receiver immunity specifications is in the area of consumer electronics," the ARRL said. "With the current explosion of consumer electronics and unlicensed devices, the Commission must — concurrently with consideration of receiver immunity standards in licensed radio services — establish interference rejection standards for unlicensed home electronic equipment and systems as well."

At the same time, the ARRL said, development of any receiver immunity standards or guidelines "should not be used as a means of justifying the overlay of otherwise fundamentally incompatible spectrum sharing partners."

The League said the FCC has had the authority to require improved RF interference immunity of consumer electronics and systems for many years "and has failed repeatedly to exercise it." The result has been "many thousands of instances of complaints against Amateur Radio operators and, in some cases, civil and criminal actions being filed," the League said. In its 21-page reply to the NOI, the ARRL recited the recent history of legislative and regulatory efforts to come to grips with interference from RF sources, including amateur stations, to receivers used in other services, such as TV and radio broadcasting, and to consumer electronics.

"ARRL continues to believe that receiver immunity should be on the order of 3 V/m for receivers that might be in the near field of an Amateur Radio station," the League said. At that distance, a receiver would be immune to an approximately 100-W ham radio transmission into a 0 dBd antenna 100 feet away. The League conceded, however, that such a standard would not address the interference immunity of telephones, computers, alarm systems, audio systems and other consumer electronics that "constitute the bulk of the instances of interference involving Amateur Radio operators."

The ARRL suggested the FCC mandate a standard for all consumer electronics or adopt a labeling or grading system that allows consumers to make their own choices about the importance of interference immunity and its value in terms of increased product cost. The League also said software-defined radio (SDR) technology offered the best opportunity to deal with receiver immunity.

The ARRL advised the FCC against relying exclusively on manufacturers to agree on how to deal with interference immunity.

The ARRL also urged the FCC not to make interference susceptibility of unlicensed devices a determining factor in whether a licensed radio service should be given an allocation in bands in where unlicensed — and unprotected — devices are deployed. As an example, the League cited the FCC's recent refusal to allocate a sliver band in the vicinity of 136 kHz "because of the ill-conceived prior deployment of unlicensed power line carrier [PLC] systems."

The FCC, in effect, "refused to make an allocation based on interference susceptibility of unlicensed and unprotected RF devices and systems," the League said. "This is improper spectrum management and the policy should be revisited."

The ARRL's comments on the NOI are available on the ARRL Web site
<<http://www.arrl.org/announce/regulatory/et03-65/ARRL-ET-03-65-cmts.pdf>>.



FCC Opinion Bolsters Federal Preemption Over RF Interference Matters

(From the ARRL Letter)

An FCC Memorandum Opinion and Order (MO&O) released earlier this month bolsters the doctrine of federal preemption over local efforts to regulate radio frequency interference (RFI). The ARRL had commented in the proceeding, WT Docket 02-100, which could have implications for Amateur Radio. The proceeding stemmed from efforts by Anne Arundel County, Maryland, to require telecommunication service providers to certify their facilities would not interfere with the county's public safety communication system.

"We find that federal law preempts provisions of the Anne Arundel County, Maryland, zoning ordinances involving radio frequency interference," the FCC declared in granting Cingular Wireless' Petition for a declaratory ruling and denying the county's motion to dismiss. ARRL had supported Cingular's position in the proceeding. Cingular asserted in its petition that Congress had established a "pervasive regulatory scheme" that grants the FCC exclusive jurisdiction to regulate RFI, and that the Anne Arundel zoning amendments conflicted with the Commission's rules regarding resolution of RFI cases. The FCC also said it expected all parties to continue cooperating to resolve remaining RFI issues.

Anne Arundel County in January 2002 adopted zoning amendments requiring commercial telecommunication providers to demonstrate that their facilities would not degrade or interfere with the public safety radio system. The amended ordinance gave the county the authority to revoke a zoning certificate if such interference or

degradation occurred or if telecommunication service providers did not certify their systems to be in compliance with FCC standards and guidelines.

The FCC said it found that the county's zoning provisions went beyond traditional zoning functions and attempted to regulate RFI. The FCC Memorandum Opinion and Order is available on the FCC Web site <http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-2196A11.doc>.



Additional Cosponsors Sign Aboard Amateur Radio Spectrum Protection Act

(From the ARRL Letter)

Additional cosponsors have signed aboard the Amateur Radio Spectrum Protection Act of 2003. Identical versions of the measure, an ARRL initiative, have been introduced in both the US House and Senate. The House version, HR 713, now has 44 cosponsors, while the Senate version, S 537, has five. Now on their third try on Capitol Hill, both measures would require the FCC to provide "equivalent replacement spectrum" to Amateur Radio if the FCC reallocates primary amateur frequencies, reduces any secondary amateur allocations, or makes additional allocations within such bands that would substantially reduce their utility to amateurs.

Florida Republican Rep Michael Bilirakis filed the House version of the bill, HR 713, on February 12. The measure's most recent cosponsors include US representatives JD Hayworth (R-AZ), Paul Gillmor (R-OH), Greg Walden, WB7OCE, (R-OR), Rick Boucher (D-VA), John M. Spratt Jr (D-SC) , Sherwood L. Boehlert (R-NY), Robert Wexler (D-FL), Mike McIntyre (D-NC), Ken Calvert, (R-CA), Joe Wilson (R-SC), John T. Doolittle (R-CA), Neil Abercrombie (D-HI) and Frank Pallone Jr (D-NJ).

Idaho Sen Michael Crapo introduced the Senate version of the bill on March 6. Original cosponsors were senators Daniel Akaka (D-HI) and Larry Craig (R-ID). Other S 537 cosponsors are US senators Conrad Burns (R-MT), Sen Susan M. Collins (R-ME) and Max Baucus (D-MT). Burns chairs the Senate Communications Subcommittee.

ARRL President Jim Haynie, W5JBP, continues to encourage ARRL members to urge their senators and representatives and to cosponsor the bills, which lends support to legislation while it's in committee. The House bill has been referred to the Subcommittee on Telecommunications and the Internet; the Senate bill will be considered by the Commerce, Science and Transportation Committee. According to Haynie, letters and e-mails are the key to getting legislation passed.

A sample letter is available on the ARRL Web site <<http://www.arrl.org/govrelations/arspa.html>>. Those writing their lawmakers are asked to copy their correspondence to the League via e-mail <specbill03@arrl.org>.

On June 11, Haynie testified on Capitol Hill on behalf of HR 713. He was the last of 11 scheduled witnesses to speak during the Subcommittee on Telecommunications and the Internet hearing, "The Spectrum Needs of Our Nation's First Responders." Haynie told the subcommittee that hams have lost more than 100 MHz of VHF and UHF spectrum over the past 15 years and that another nearly 360 MHz of VHF and UHF spectrum "has been substantially compromised."

The text of HR 713 and S 537 is available via the Thomas Web site <<http://thomas.loc.gov>>.



Active Club Online Primer Now Live!

(From the ARRL Letter)

If your club is looking for loads of helpful information to keep things moving, check out the Active Club Online Primer <<http://www.arrl.org/FandES/field/club/cpw>>. Combining the best of the completely updated Club President's Workbook and the Special Service Club Manual, this online resource permits quick access to hundreds of pages that can enhance your club's functioning and help it to attract new members. Need to know how to get your club more involved in public service? How to present programs that make meetings more lively? How to help hams with disabilities? Find it fast on the Active Club Online Primer!



Astronaut Works Dozens of Stations From ISS During Field Day

(From the ARRL Letter)

US astronaut Ed Lu, KC5WKJ, worked more than three dozen stations from NA1SS aboard the International Space Station during Field Day 2003 June 28-29. The contacts appear to have been made during at least two ISS passes over North America. Operating the Amateur Radio on the International Space Station equipment, Lu managed to contact 39 stations in the US, Canada and Mexico on 2-meter FM simplex. For more information on ARISS, visit the ARISS Web site <<http://www.rac.ca/ariss>>.



ARRL DX Bulletin

DX Bulletin 31 ARLD031
From ARRL Headquarters
Newington CT July 31, 2003
To all radio amateurs

This week's bulletin was made possible with information provided by K8FFO, the OPDX Bulletin, The Daily DX, QRZ DX, 425DXnews, DXNL, WA7BNM and Contest Corral from QST. Thanks to all.

RODRIGUEZ ISLAND, 3B9. Guy, 3B9ZL has been QRV on 15 meters using CW and SSB around 0730 and 1430z. QSL via FR5ZL.

CROATIA, 9A. Aco, DJ0LZ is QRV as 9A/DJ0LZ/p from Pag Island, IOTA EU-170, until August 9. QSL to home call.

MOROCCO, CN. Mohamed, CN8KD has been QRV on 6 meters around 2200 to 2300z.

PHILIPPINES, DU. Peter, DU9/DK2PR/p and Bert, DU9/DK2BR/p are QRV from Samal Island, IOTA OC-235, until August 4. They are active on 20 and 15 meters on the usual IOTA frequencies. QSL to home calls.

ST. PIERRE AND MIQUELON, FP. Paul, FP/K9OT and Peg, FP/KB9LIE are QRV from Miquelon, IOTA NA-032, until August 5. Activity is on 160 to 6 meters, including the newer bands, using CW and SSB. FP/K9OT will also participate in the North American CW QSO Party. QSL to home calls.

SARDINIA, IS0. IS0/IK5XCT is QRV from Sardinia, IOTA EU-024, until August 7 and IM0/IZ0EJQ is QRV from San Pietro, IOTA EU-165, until August 20. QSL to home calls.

WAKE ISLAND, KH9. Jake, N6XIV/KH9 is QRV for about four weeks. He is here on a work assignment, so his operating time is limited. He is using only SSB. QSL via K2FF.

NETHERLAND ANTILLES, PJ. Peter, PJ4/PA2VST is QRV from Bonaire, IOTA SA-006, until August 11 and is active mainly on 6 meters. QSL to home call.

UZBEKISTAN, UK. Mikhail, UK8OM is licensed for 6 meters and operates daily on 50115 kHz using CW. QSL direct.

CAMBODIA, XU. Hugo, LA5YJ is QRV as XU7ACW and is here until September 9. He is active on 40, 30, 20 and 17 meters using CW. QSL to home call.

CAYMAN ISLANDS, ZF. Steve, K8FFO will be QRV as ZF2FF from Grand Cayman from August 5 to 11. Activity will be on 20 and 17 meters using CW and SSB in the morning and afternoon each day. QSL to home call.

DXCC Operations Approved. The following stations, along with their effective dates, are approved for DXCC credit. 3XD02, March 19 to April 31, 2003, 3XY1L, January 1 to December 31, 2003, 5X2A, June 24 to July 1, 2003, D2CR, January 1 to December 31, 2003, J5UCW, March 8 to April 6, 2003, ST2CF, March 17 to April 2, 2003 and YA/N4SIX, ongoing.



ARRL Propagation Forecast Bulletin

Propagation Forecast Bulletin 31 ARLP031

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From Tad Cook, K7RA
Seattle, WA August 1, 2003
To all radio amateurs

Strong geomagnetic activity continues. The estimated Planetary A Index is a number derived from observations at geomagnetic observatories around the world. The higher the A index, the higher the geomagnetic activity, and generally this is worse for HF propagation.

We like to see low geomagnetic activity with lots of sunspots for great HF propagation. Unfortunately, after the peak of a solar cycle we can experience long periods of active geomagnetic conditions. This week the average daily planetary A index jumped to 21.9 from 16.1 the previous week.

Sunspots and solar flux were down quite a bit from the previous week. Average daily sunspot numbers dropped from 195.3 to 74.6, and average daily solar flux went from 147.7 to 106.2.

Daily solar flux values are expected to stay around 105-115 from August 1-8, and then rise to around 140 from August 12-18. The planetary A index for Friday through Monday, August 1-4 is expected to be 25, 20, 15 and 10. August 4-6 is expected to be a quiet geomagnetic period, worth a try for reasonable HF propagation.

Now that July has passed, we can look at some monthly averages for solar flux and sunspot numbers.

Due to some high values around the middle of the month, July actually had higher average daily sunspot numbers than any month since January. The monthly average sunspot numbers, January through July, were 150, 87.9, 119.7, 114.3, 89.6, 118.4 and 132.8.

July's average daily solar flux was just a little lower than the June values. Average daily solar flux values for January through July were 144, 124.5, 133.5, 126.8, 116.6, 129.4 and 127.7.

The fall equinox is a little over seven weeks away. HF conditions should improve as the days grow shorter and we move from summer to fall propagation.

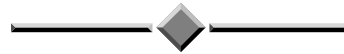
For more information on propagation and an explanation of the numbers used in this bulletin see the Propagation page on the ARRL Web site at <http://www.arrl.org/tis/info/propagation.html>.

Sunspot numbers for July 24 through 30 were 134, 94, 52, 60, 56, 63, and 63, with a mean of 74.6. 10.7 cm flux was 125.2, 111.6, 102.6, 101.7, 103.4, 99.9, and 98.7, with a mean of 106.2. Estimated planetary A indices were 10, 11, 26, 24, 17, 36, and 29, with a mean of 21.9.



Helpful Hints

Bus Drivers. Pretend you're an airline pilot by wedging your accelerator pedal down with a heavy book, securing the steering wheel with some old rope, and then strolling back along the bus chatting casually to the passengers.



Shallow Thoughts

Why is freight on a ship called a "cargo" and freight on a truck is called a "shipment?"

Carbon Amateur Radio Club – 2002-2003 Officers

President: Anthony “Goody” Good, K3NG, goody@fast.net
Vice President: Rob Roomberg, KB3BYT, roomberg@ptd.net
Secretary: Larry Lilly, N3CR, ka3afy@ptd.net
Treasurer: John Schreibmaier, W3MF, w3mf@ptdprolog.net
W3HA Callsign Trustee: Bill Dale, WY3K
W3HA Repeater Trustee: John Bednar, K3CT
Public Information Officer: Bill Kelley, KA3UKL

Directors

Bob Schreibmaier, K3PH, John Bednar, K3CT, Bob Culp, KB3IDV

ARES/RACES Committee

Bruce Fritz, KB3DZN (DC)
Darryl Gibson, N2DIY
Todd Deem, KB3IKX

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

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
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Kresgeville, PA 18333-0166