The Illuminator

The monthly newsletter of the Carbon Amateur Radio Club

November 2003

November Meeting

The next regular meeting of the Carbon Amateur Radio Club will be held on Thursday, November 20, at 7:30 p.m. at the EMA Center in Nesquehoning. See you there!

Treasurer's Report

By John, W3MF

As of October 15, 2003:

Previous Balance	652.98
Receipts (dues)	0.00
Subtotal	652.98
Disbursements (newsletter)	5.92
Final Total	647.06

Amateur Radio Support Continues in California Fire Disaster

(From the ARRL Letter)

Ham radio volunteers continue to play a role in the ongoing fire emergency in Southern California. A dozen fires, some of them massive, now have burned some 750,000 acres and claimed 20 lives, most of them in the hard-hit San Diego area. Thousands of residents have been evacuated. ARRL San Diego Section Manager Kent Tiburski, K6FQ, says a shift in winds has moved the fire danger away from San Diego proper, but hams continue to supplement communication at two of nine shelters in the area — one at Mountain Empire and a second in Borrego Springs, where hams from Imperial County have been assisting.

"We've been busy," Tiburski said October 29. "This is by far the worst disaster we've ever experienced." He estimated that approximately 200 Amateur Radio Emergency Service (ARES) and Radio Amateur Civil Emergency Service (RACES) volunteers have participated so far in the fire emergency with about 100 in the field at any given time.

Tiburski says hams have been assisting American Red Cross relief efforts, primarily in terms of logistics and working with damage assessment teams. Others have provided liaison between the California Department of Forestry and the Red Cross, which is providing meals and shelter for firefighters. Nearly 13,000 firefighters and support personnel have been deployed in California to battle the fires.

The fires have claimed nearly 1200 homes in San Diego County alone, Tiburski reported, and burned some 450,000 acres. "Everybody I've talked with — to a person — knows someone personally or knows of someone who has lost a house," he said. Mount Palomar — home of the famous observatory—was evacuated, Tiburski said, and firefighters were making a special effort to protect telecommunications sites there as well.

Although the hot, dry Santa Ana winds have abated, Tiburski notes that a stiff onshore breeze is now driving the fires to the east.

San Diego Salvation Army Team Emergency Radio Network (SATERN) Coordinator Paul Cook, N6RPF, reports he and other SATERN members have been providing communication assistance for The Salvation Army's relief efforts. They've had help from other amateurs as well, he said.

At least a half-dozen Salvation Army emergency disaster services canteens are providing meals to evacuees and firefighters. SATERN National Director Pat McPherson, WW9E, said SATERN is keeping relief teams in contact with each other as

well as supporting communication for firefighters, police and emergency responders.

Elsewhere in California, ARRL Orange Section Manager Carl Gardenias, WU6D, says that Amateur Radio operators continue working with relief agencies in that part of the state. "We actually have more Amateur Radio operators available than the Red Cross shelters can use," he said. With ARES teams and other ham radio volunteers from Riverside, San Bernardino and Orange counties available, the hams have been able to rotate shifts.

"The intensity of these fires has never been at this level before," Gardenias said, comparing the current situation with fire emergencies in the recent past.

At the Red Cross shelters — where more and more displaced people are showing up — hams have been "shadowing" shelter managers, communicating shelter supply requests, and helping with health-and-welfare inquiries for shelter clients, Gardenias said. Amateur Radio also is serving to keep shelters in touch with the Red Cross regional headquarters.

At least 1000 evacuees are taking refuge in a former TWA hangar at the San Bernardino airport.

Amateur Radio SSTV equipment was being used to assist firefighters in San Bernardino. The radio equipment and operators go out on the fire trucks and report what they see back to the command center, Gardenias explained.

In the Los Angeles Section SM Phineas Icenbice, W6BF, reports the Stevenson Ranch fires and Arrowhead are the "very hot spots," and firefighting helicopters and crews are using water from nearby Magic Mountain Amusement Park and from golf courses to help douse the flames. Smoke was heavy October 29 in the San Fernando Valley where Icenbice lives.

Amateur Radio operators also are assisting at Red Cross shelters in the Los Angeles area as well as helping the relief agency to locate and establish new shelters. Icenbice said the problem areas appear to be the outer areas of Los Angeles County and in the mountains. Hams have been helping to locate people left homeless because of the fires.

California Gov Gray Davis has declared states of emergency in five counties. As this letter is prepared on October 31, cool and foggy weather have helped to stall the wildfires' progress. — Steve Ewald, WV1X, contributed information for this report.



Radio Amateurs of Canada Asks Industry Canada to Drop Morse Requirement

(From the ARRL Letter)

At the 21st Industry Canada-Radio Amateurs of Canada Amateur Radio Advisory Board meeting October 23 in Ottawa, RAC presented its Board-approved recommendation to drop Morse code as an Amateur Radio qualification requirement. Other topics raised at the session included options for consideration related to four-character call sign suffixes; RACs submission to the Committee on the National Antenna Tower Policy Review; and RAC's efforts to bring more young people into Amateur Radio through the RAC Youth Education Program, which was introduced and discussed. Industry Canada invited RAC to submit detailed proposals on dropping Morse code and the use of four-character call signs. Industry Canada expressed appreciation to RAC for its prompt and comprehensive response to the department's request for input on significant changes to regulations arising out of the WRC-2003 decisions. Representing RAC was President Bill Gillis, VE1WG, Vice President-Regulatory Affairs Jim Dean, VE3IQ, and directors David Nimmo, VE1NN, and BJ Madsen, VE5FX.



ARRL Propagation Forecast Bulletin

Propagation Forecast Bulletin 44 ARLP044
From Tad Cook, K7RA
Seattle, WA October 31, 2003
To all radio amateurs

Solar excitement continued this week. As this bulletin is being written Thursday night, an extreme geomagnetic storm is in progress. The mid latitude

K index has been as high as 9, and severe space weather is predicted for the short term. Average daily sunspot numbers more than doubled this week to 201.4. Average daily solar flux was nearly double the previous week at 249. Average daily sunspot numbers for the week as reported in this bulletin have not been this high since the week of November 7-13, 2002, when it was 205.4. For solar flux, we go back to the week of January 24-30, 2002 when the average daily solar flux was 249.6.

On Friday, October 24, a coronal mass ejection swept by earth around 1500z. The planetary K index went as high as 7, and aurora borealis was seen as far as the southern United States. On Sunday, October 26 an X-class solar flare at 0650z was followed by another one twelve hours later at 1850z. On October 28 one of the most powerful solar flares seen in many years hurled a cloud of particles traveling 5,000,000 miles per hour toward earth. This triggered an S-3 class solar radiation storm, and the next day the planetary A index shot up to 189, and mid-latitude A index was 199. On that day, October 29, an intense geomagnetic storm raged in response to a coronal mass ejection that hit earth around 0630z. Another powerful coronal mass ejection hit earth on October 30. Check the web site, http://www.space.com/scienceastronomy/solar_flare_031028.html for a news article on the major flares and resulting storms.

This weekend is the ARRL November CW Sweepstakes. Conditions could be good if the geomagnetic disturbances cool down. Currently the predicted planetary A index for Friday through Monday, October 31 through November 3 is 100, 30, 15 and 15. The latest solar flux forecast for those same days is 265, 260, 255 and 255.

Peter Greene, N2LVI wrote to inquire about when a solar cycle starts and ends. It isn't easy to determine, and usually is some time after the peak or the minimum that we can say when it was, because in order to smooth out the solar cycle so that the peak can be seen, a running average must be run. In addition, a change of sunspot cycles means the polarity of the sunspots change, and spots from both the old and new cycles coexist. A good explanation for this is on this page: http://www.sunspot.noao.edu/PR/answerbook/sunspots.html#q94. Peter also sent us a link to http://www.gsl.net/w2vtm/hf_solar.html where he put up a graphic look at HF propagation and solar indices.

One of our readers has been taking photos of the sun. Jake, N0LX sent along a link to http://hometown.aol.com/n0lx/sun102403.htm showing his photos.

In closing, if the geomagnetic storms calm we could be in for some fantastic conditions, assuming the sunspot numbers stay high. Finally, a couple of graphs show the recent activity here, http://www.dxlc.com/solar/ and here: http://www.wm7d.net/hamradio/solar/index.shtml.

For more information about 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 October 23 through 29 were 122, 160, 139, 191, 238, 230 and 330, with a mean of 201.4. 10.7 cm flux was 209.3, 190.6, 221.5, 298.3, 257.2, 274.4 and 291.7, with a mean of 249. Estimated planetary A indices were 7, 34, 14, 10, 15, 20 and 189, with a mean of 41.3.



Virginia BPL Startup Sparks ARRL Response

(From the ARRL Letter)

The ARRL this week put officials in Manassas, Virginia, on notice that the League will act on behalf of its members to ensure full compliance with FCC regulations when the city's Broadband over Power Line (BPL) system starts up in a few months. The League was responding to media reports that Manassas — a Washington, DC, suburb — has approved plans for a citywide BPL rollout. Manassas City Council reportedly voted unanimously October 16 to grant a 10-year franchise to Prospect Street Broadband to expand a BPL field trial and offer high-speed Internet service to the entire community over municipal power lines. ARRL CEO David Sumner, K1ZZ, on October 22 faxed Manassas Mayor Marvin L. Gillum to point out BPL's dark side — the potential for RF interference from and to any BPL system.

"Your advisors no doubt have made the Council fully aware of the great potential for radio interference from such a system," Sumner said. "In particular, you are no doubt well aware that Title 47 CFR §15.5 requires that no harmful interference is caused to any radiocommunication service, and that the operator shall be required to cease operation upon notification by a Federal Communications Commission representative that the device is causing harmful interference." Sumner noted that the same FCC Part 15 rule also provides no protection against interference from the operation of an authorized radio station.

"Tests conducted by ARRL technical personnel have shown that the system planned to be deployed in Manassas causes harmful interference to the Amateur Radio service," Sumner said. "We also have reason to believe that the system will be susceptible to interference from normal amateur station operations."

An article in Potomac News.com touted the impending Manassas BPL rollout as the first of its type in the US. Sumner said he was writing to alert the City of Manassas "on behalf of its members who live in and use the public thoroughfares of Manassas" that the ARRL "will ensure that there is full compliance with the FCC regulations" once the city's BPL system is in operation.

Prospect Street Broadband reportedly will offer the BPL service for $29.95 a month. One estimate predicts the city stands to gain up to $4.5 million over the 10-year life of the contract, due to be signed this week.

The Manassas BPL field trial is one of the smallest now under way and involves fewer than a dozen homes and businesses. It was installed in an area that has underground utility wiring and no Amateur Radio licensees nearby.

BPL articles in major media have proliferated in recent weeks, many of them painting the service in rosy hues and neglecting to point out the potential for radio interference to and from BPL by other HF spectrum occupants. An October 13 article in The Wall Street Journal, "A New Outlet," by Walin Wong, quotes one trial user who calls the service "fantastic." But Wong also notes that one "Achilles' heel" of BPL is that serving rural areas would require installing costly repeaters every mile or so along the power line. The article also deals with the reluctance on the part of some electric utilities to embrace the technology.

Sumner also reacted to the WSJ article. In a letter to the editor not yet published, he pointed out that BPL "amounts to sending a wideband radio signal over unshielded wires that were not designed for the purpose" and that do not work well for the 2 to 80 MHz signals common in BPL systems. Instead, "they function as antennas," he said, and that can lead to interference to radio services, including some involved with public safety.

Sumner said potential broadband technology and delivery investors would be far better off considering fiber in densely populated areas and adaptations of wireless LAN technology in rural areas.

Additional information on BPL and video clips from field trial sites are on the ARRL "Power Line Communications (PLC) and Amateur Radio" page http://www.arrl.org/tis/info/HTML/plc/. To support the League's efforts in the BPL fight, visit the ARRL's secure BPL Web site https://www.arrl.org/forms/development/donations/bpl/.



New Two-Ham Crew Takes Over ISS Reins

(From the ARRL Letter)

The new two-ham crew of Expedition 8 Commander and NASA ISS Science Officer Mike Foale, KB5UAC, and Russian Cosmonaut and ISS Flight Engineer Alexander "Sasha" Kaleri, U8MIR, officially took over the reins of the International Space Station this week. A formal change-of-command ceremony took place Friday, October 24.

The contingent of space travelers aboard the ISS expanded to five this week with the arrival of the Expedition 8 crew and European Space Agency (ESA) astronaut Pedro Duque, KC5RGG, who accompanied them into space. Duque, who spent the week aboard the ISS, conducted two Amateur Radio on the International Space Station (ARISS) http://www.rac.ca/ariss/ contacts with school groups in his native Spain using the special call sign ED4ISS. He'll return to Earth October 27 with Expedition 7 Commander Yuri Malenchenko,

RK3DUP, and NASA ISS Science Officer Ed Lu, KC5WKJ, aboard the Soyuz transporter that's been docked with the ISS. Malenchenko and Lu have been aboard the ISS since April.

The Expedition 8 crew, which left Earth from Russia October 18, will spend the next six months on the ISS. The two teams have been conducting crew hand-over activities during their eight days of joint operations. Duque, who flew under a commercial agreement between the Russian space agency Rosaviakosmos and the ESA, also conducted a series of scientific studies during his ISS stay. This mission mark Duque's second space flight.

The Expedition 7 crew chalked up several human spaceflight milestones. During its tour, the crew marked the 1000th day of ISS habitation on July 29, Lu's 40th birthday on July 1, and Malenchenko's marriage by proxy on August 10 to Ekaterina Dmitriev, a native of Ukraine who now lives in Texas. Upon his return, the couple reportedly plans a church wedding in Russia.

Expedition 8 Commander Foale, 46, is a veteran of five space flights and has spent a total of nearly 180 days in space — including more than four months on the Russian Mir space station in 1997. During his Mir stay, Foale found ham radio a valuable supplement to conventional Russian and NASA communication systems after the station was damaged in a collision with an unmanned Progress cargo rocket. Kaleri, 47, flew on three Mir missions and has logged 416 days in space. — information provided by NASA was used in this report.

ARRL DX Bulletin

DX Bulletin 44 ARLD044
From ARRL Headquarters
Newington CT October 30, 2003
To all radio amateurs

This week's bulletin was made possible with information provided by N1RL, ZS6MG, the OPDX Bulletin, The Daily DX, 425DXnews, DXNL, WA7BNM and Contest Corral from QST. Thanks to all.

VIETNAM, 3W. Eddy, XV9DT is QRV as 3W22S until December 31 to celebrate the 22nd South East Asian Games hosted in Vietnam. QSL via operator's instructions.

NEPAL, 9N. 9N7XD has been QRV on 15 meters between 1045 to 1330z and then on 20 meters from 1630 to 1730z. QSL via JA7KXD.

OMAN, A4. Alex, A45WD has been QRV on 80 meters around 2330z. QSL via YO9HP.

BALEARIC ISLANDS, EA6. Laci, HA6NL, Zsolt, HA6PS, Tibor, HA6ZV and Sanyi, HA7JJS will be QRV as EA6/homecalls/p from November 2 to 9. During the HA-QRP Contest they will be signing EA6/HA5RT/p. QSL contest call via HA6NL and all others to home calls.

IRAN, EP. Shahryar, EP4PTT has been QRV on 20 meters SSB around 1600z. QSL direct.

LIECHTENSTEIN, HB0. Look for Laci, HB0/HA0HW/p, Tomi, HB0/HA4DX/p and Geza, HB0/HA4XG/p to be QRV from Masescha from November 2 to 10. They will be active on 160 to 10 meters with an emphasis on the low bands, using CW, SSB and RTTY. QSL to home calls.

PANAMA, HP. Special event station HP100RCP will be QRV on all bands and modes from November 1 to 3 to celebrate the 100th anniversary of the Republic of Panama. QSL via bureau.

NETHERLANDS, PA. A group of operators from the Belgian branch of the International Police Association will be active as PA/homecalls from EU-146, from October 31 to November 2. Activity will be on 80 to 10 meters using CW, SSB and digital modes. They will participate in the IPA Contest as PA/ON4IPA. QSL contest call via ON6ZV and all others to home calls.

CANADA, VE. Rick, N1RL will be QRV from the Society of Newfoundland Radio Amateurs' Marconi Commemorative Station VO1AA on Signal Hill. QSL via operator's instructions.

COCOS KEELING, VK9C. VK9CYL has been QRV lately on 15 meters around 0000z and 1000z and 20 meters around 1300z. QSL via VK3DYL.

VANUATU, YJ. Tusti, YJ0ONM has been QRV using RTTY around 0500z on 20 meters working both US and European stations. QSL via W4WET.

SOUTH COOK ISLANDS, ZK1. Dave, ZK1AQT has been QRV on 160 meters around 0700z and then again around 0800z. Prior to this activity, he has been active on 40 meters. QSL via W6ORD.

CALLSIGN CORRECTION. As reported in DX bulletin ARLD043, Vlado, ZS6MG and Emil, ZS6EGB were actually QRV as V55V and V55E, respectively, until October 27. They were also QRV as V55V during the CQ WW SSB contest. QSL contest call via ZS6MG as well as home calls.

THIS WEEKEND ON THE RADIO. The ARRL November CW Sweepstakes, North American Collegiate ARC Championship, ARCI Running of the QRP Bulls, High-Speed Club CW Contest, IPA CW/SSB Contests, Ukrainian DX Contest and the DARC 10-Meter Digital "Corona" contest will certainly keep contesters busy this weekend. Please see November QST, page 110 and the ARRL and WA7BNM contest websites for details.



The QRPer and the Net

By Paul Dunphy, VE1DX

One of the Local QRPers came by the other day and beat his way up the hill. He stomped over to the tower and paced back and forth, waiting for us to give him our attention. We had just finished touching up a few rust spots that had finally worked their way through the galvanized legs on the tower. There was no damage done, but we'd seen a few towers collapse under the weight of all the aluminum they were holding over the years. We had heard reports of a new one being activated in the Pacific next month. We remembered what Lord Baden Powell so often said, "Be prepared!" And we were. Always.

After we had put the paintbrush in a bottle of turpentine to soak, the QRPer began, "I have a problem! This past week I got a complaint from someone that I had QRMed their net. I was calling the guys in The Gambia on 40 meters. Apparently my audio splattered on top of this net. Or so they say!" He paused, took his hands out of his pocket and wiped his forehead. "This is serious", he continued, "and I don't think I caused any problems, either. The person who complained about me cited FCC regulations, and he might be an OO. The thing is, all I was running was 50 watts and I was 2 KHz away from his frequency. I was trying to work C56R. I think it was probably the other dozens of fellows in the pileup running full power that caused the problem, not me! What do you think?" Son of a Gun! If the QRPer thought we were going to dive into this one, he was mistaken... so we went for the usual out. We hauled him up the hill to see the Old Timer.

When we got there, the Old Timer was sitting on the veranda. He had just finished painting his own tower. We knew this because we had gotten the idea from him when we were discussing the Pacific DXpedition last week. These were trying times for DXers, with dire forecasts of huge pileups and rumors that the DXpedition was only going to last for 3 days. All we needed was a drop in the flux or a bump in the A and K indices and we would lose our perch on the top rung of the DXCC ladder. We began to think this might not have been the time to bother the Old Timer with questions about QRMing nets. He was rocking back and forth and as soon as we sat down the QRPer started. "I got an email from a W4 who said I QRMed his net on 40 meters!" he said, staring the Old Timer straight in the eye. The Old Timer looked back at him and just nodded.

The QRPer, working up his courage and feeling a sense of urgency, ploughed on, "I was trying to work this C56 DXpedition, and I showed the email to a few of the fellows at the DX club. Some of them say I could be in trouble. They say if this fellow is an OO and if he reports me to the FCC, I might get a citation. A couple of the other guys say he's an NN, an abbreviation they use for Net Nerd! The Big Guns that have been around the track a bit figure that if this fellow is an OO and if he reports me to the FCC and the ARRL, I'll get a citation and I might even lose credit for the DXCC country. And I didn't even work him! And that's the problem!"

The Old Timer looked at the QRPer for a moment, and then he asked, "So, the worry is that this person could somehow get the DXCC desk to delete a country from your totals that you didn't even work?" The QRPer nodded with a worried look, "Yes! That's the problem. I don't want to get an OO citation, either, but I surely don't want to

lose credit for a country. As it happens, that would drop me from 175 to 174, and then I'd have to peel my endorsement sticker off my certificate!" The QRPer was sweating profusely now, and he glared at the Old Timer with his beady little eyes. "What am I going to do about it?"

The Old Timer took a deep breath and asked, "How can the DXCC desk delete credit for the country if you didn't work it?" The QRPer looked at the Old Timer and said with a little less desperation in his voice, "Well, you see, I didn't work that C5, but I did have the country confirmed before from another operation. So if this net guy reports me to the DXCC desk, they will likely delete credit for that country. They won't check which call I worked for the credit. They'll just read what the W4 said, and delete my C5!"

"Why," the Old Timer replied, "would they do that? You are a member in good standing with the ARRL, right? And you participate in the DXCC program, right? So why are they going to take a country away because someone sends them an email saying you misbehaved trying to work someone else? What proof does this W4 fellow have that your signal was the one that interfered with his net? What about the 100's of other guys that were calling at the same time, and most of them using full legal power, or maybe a bit more?" The QRPer nodded in agreement. "He's got that covered! He said in his email that he and two other members of the net closed down and moved to the DX's listening frequency, 7.180 MHz. He says he copied 10 other people calling the DX! I think he's going to report us all!"

The QRPer was pacing in a circle and looking at the ground. He stopped, looked at us, then at the Old Timer and finally said, "Well?" looking the Old Timer in the eye with a defiant glare. "Well what?" the Old Timer shot back at him. "What if he reports all of us? We'll all lose credit for C5! And I'll lose my sticker!"

The Old Timer never answered. The QRPer looked at him and started tapping his fingers on the arm of the chair. The Old Timer began humming to himself and looking out over the bay. We wonder which one would give in first. Finally the QRPer jumped up, bellowed, "What's the use!" and was off down the hill, arms waving and shaking his head back and forth. We looked over at the Old Timer, "What do you make of that?" we asked. He shook his head slowly, "Who knows? I'd say that fellow has as much chance of losing C5 as he has of the W4 letting him check into the 40 meter net he supposedly QRMed." And that was all he would say. He turned and made his way into the shack to tune 20 meters for the late afternoon polar path to Asia.

What could we say? Only that the Deserving will work the DX. DX IS!



Helpful Hints

Smell gas? Locate the suspected leak by striking an ordinary match in every room in the house until a bang tells you the source of the escaping gas.



Shallow Thoughts

Why is abbreviation such a long word?"

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 Schreibmaier, W3MF, w3mf@ptd.net
W3HA Callsign Trustee: John Bednar, K3CT, k3ct@fast.net
W3HA Repeater Trustee: John Bednar, K3CT, k3ct@fast.net
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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
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Kresgeville, PA 18333-0166