# CQ CHATTER

VOLUME 13 • Issue #11 WOOD COUNTY AMATEUR RADIO CLUB DECEMBER 2012
P.O. BOX 534, Bowling Green, OH http://wcarc.bgsu.edu



## Letter from the President

*December 2012*

Well, we are at the end of another year. It's hard to believe another one has passed so quickly. With the end of the year, come Club elections for officers. As I had previously mentioned, we need some folks to volunteer to be on our nominating committee, to nominate folks to lead the Club. If no one steps up and lets me know, I'll volunteer you...hi hi!

Please e-mail me within a week with your nominations. According to our Bylaws, we need 3 people on the nominating committee. The committee will establish a slate of candidates for the positions of President, Vice President, Secretary, Treasurer, and (elective) Board of Directors.

I thank you in advance for your nominations for this committee. We need to have this committee in place before our meeting in December on Monday the 10th.

(Eyeball QSO time at 7pm, meeting starts at 7:30pm. QTH is the Wood Co. Sheriff's Office on Gypsy Ln. in Bowling Green.)

73 de Craig, NM8W ■

**WCARC Weekly Net:**
**Tuesdays at 2030 EST**
***(0130 Z year-round)***
**147.18 MHz 67 Hz PL**

***Business Meeting***
**Monday, December 10th**
**TIME: 7:30 pm/EB 7:00 pm**
**PLACE: Sheriff's Training Room**
**E. Gypsy Lane & Dunbridge Rd.**
**Bowling Green, OH**

## Net Check Ins

***Oct 30***

***N8YAE (NC)***
***W8PSK***
***WB8NQW***
***KG8FH***
***N1RB***
***WB8ABY***
***KC8ZJW***
***WD8JWJ***
***KC8EKT***
***KD8RNO***
***KD8PCQ (11)***

***Nov 6***

***K8OVO (NC)***
***WB8ABY***
***W8PSK***
***WB8NQW***
***K8BBK***
***N1RB***
***N8PYA***
***K1NSN-Kevin***
***N8YAE (9)***

***Nov 13***

***NM8W (NC)***
***K8BBK***
***W8PSK***
***WB8NQW***
***WB8ABY***
***N1RB***
***WD8JWJ***
***N8YAE (8)***

## *WCARC*

## *2 m Net Control Roster*

**Net meets every Tuesday at 2030 EST/0130 Z**

| | | |
|---|---|---|
| **Nov** | **27** | **N1RB** |
| **Dec** | **4** | **NM8W** |
| **Dec** | **11** | **K8OVO** |
| **Dec** | **18** | **N8YAE** |
| **Dec** | **25** | **WB8NQW** |
| **Jan** | **1** | **N1RB** |
| **Jan** | **8** | **NM8W** |

## Brain Teasers

**1.** What is solar flux?

a.) density of the Sun's magnetic field

b.) radio energy emitted by the Sun

c.) number of sunspots on the side of the Sun facing the Earth

d.) tilt of Earth's ionosphere toward the Sun

**2.** What is the circuit called that causes a transmitter to automatically transmit when the operator speaks?

a.) VXO b.) VOX

c.) VCO d.) VFO

3. What is the maximum symbol rate permitted for packet emissions below 28 MHz?

a.) 300 bauds b.) 1200 bauds

c.) 19.6 kilobauds d.) 56 kilobauds

# *December Contests*

The contest lineup for the month of December is given below. Please note that the WARC bands (60, 30, 17 and 12 m) are never open to contesting.

| | | |
|---|---|---|
| **Dec 2** | *0000 to 2359 Z* | 10 m |
| **10 Meter RTTY 'test** | | **RTTY** |
| **Dec 8-9** | *0000 to 2400 Z* | 10 m |
| **ARRL 10 Meter 'test** | | **all modes** |
| **Dec 15-16** | *0000 to 2400 Z* | 80 m to 10 m |
| **OK (Czech Rep.) DX RTTY 'test** | | **RTTY** |
| **Dec 15-16** | *1400 to 1400 Z* | 160 m to 10 m |
| **Croatian CW 'test** | | **CW** |
| **Dec 16** | *1800 to 2359 Z* | 80 m to 10 m |
| **ARRL Rookie Roundup** | | **CW** |
| **Dec 21-Jan 8** | *0001 to 2359 Z* | 160 m to 10 m |
| **Lighthouse Xmas Lights QSO Party** | | **all modes** |
| **Dec 29** | *0000 to 2359 Z* | 160 m to 10 m |
| **RAC (Canada) Winter 'test** | | **all modes** |
| **Jan 1** | *0000 to 2400 Z* | 80 m to 10 m |
| **ARRL Straight Key Night** | | **CW** |

## DON'T FORGET!

## 10 meter informal net meets Sunday

## at 2030 EST on 28.335 MHz

*Nov 20*

***WB8NQW (NC)***
***K8BBK***
***WB8ABY***
***W8PSK***
***KG8FH***
***N8YAE***
***KC8EKT (7)***

*Nov 27*

***N1RB (NC)***
***K8BBK***
***W8PSK***
***KG8FH***
***WD8JWJ***
***WB8NQW***
***N8YAE***
***KD8PCQ***
***K8OVO (9)***

# *New Proposals from FCC*

***from ARRL News***

The FCC is proposing to change the Amateur Radio Service allocation to the 160 meter band (1800-2000 kHz), reallocating the 1900-2000 kHz segment to the Amateur Radio Service on a primary basis. In an *NPRM*, the FCC noted that "the ARRL has identified the 160 meter band and the amateur HF bands as '[b]y far, the heaviest-used [Amateur Service] allocations.'"

Historically, the 1715-2000 kHz band was allocated exclusively to the Amateur Service. In 1953, the FCC removed the 1715-1800 kHz segment from the Amateur Radio Service and allocated the 1800-2000 kHz band to the Amateur Service on a shared basis with the Radionavigation Service. Then in 1983, the FCC allocated the 1800-1900 kHz band to the Amateur Service on an exclusive basis and the 1900-2000 kHz band to the Radiolocation Service on a primary basis for federal and non-federal use and to the Amateur Service on a secondary basis. The FCC stated that "[t]he purpose of allocating this band [1900-2000 kHz] to the Radiolocation Service was to provide re-accommodation spectrum for radiolocation users that will have to move out of the 1605-1705 kHz band when AM broadcasting is implemented in that band." The AM broadcasting proceeding was resolved in 2000, and a review of the FCC's Universal Licensing System (ULS) database finds that no one is licensed to use this non-federal Radiolocation Service allocation.

Currently, federal use of the 1900-2000 kHz segment is light, with only 10 assignments authorized to operate in this segment. "A single

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federal assignment authorizes land and mobile stations in the Radiolocation Service to transmit on 1922 kHz using a necessary bandwidth of 600 Hz within a protected radius of 193 kilometers centered on San Diego, California," the FCC noted in the *NPRM*. "All other federal assignments in the 1900-2000 kHz band are for unallocated uses, and thus, these assignments operate on an unprotected and non-interference basis."

The FCC is proposing to amend the US Table of Allocations and remove the federal and non-federal Radiolocation Service allocations from the 1900-2000 kHz band and the raise the secondary Amateur Radio Service allocation to primary status because "there appear to be few (if any) Radiolocation Service stations operating in this band," it said. "In addition, we note [from WARC-79] that 'this [Radiolocation Service] allocation was made for re-accommodation purposes and not to provide additional spectrum for radiolocations needs,' that the Commission has concluded its AM Expanded Band proceeding that would have prompted non-federal RLS licensees to relocate to the 1900-2000 kHz band and that this band was historically allocated to the Amateur Service on an exclusive basis."

**New Amateur Service Band at 135.7-137.8 kHz**

In the US, the 130-160 kHz portion of spectrum is allocated to the Fixed Service and the Maritime Mobile Service on a primary basis for both federal and non-federal use. Delegates at WRC-07 allocated 135.7-137.8 kHz to the Amateur Radio Service in all ITU Regions on a secondary basis. Delegates also chose to restrict the use of this low frequency allocation to those Amateur Radio stations transmitting with a maximum equivalent isotropically radiated power (EIRP) of 1 W, as set forth in RR 5.67A.

Even though there are no non-federal stations in the Fixed Service or the Maritime Mobile Service that are licensed to operate at 135.7-137.8 kHz and federal use of this portion of spectrum is light, the FCC noted that electric utilities operate Power Line Carrier (PLC) systems in the 9-490 kHz band for "communications important to the reliability and security of electric service to the public." In ET Docket No. 02-98, the FCC considered allocating the 135.7-137.8 kHz band to the Amateur Radio Service on a secondary basis and examined the potential for amateur transmissions to cause harmful interference to the PLC systems. At that time, however, the FCC declined to do so "after finding the potential for interference between amateur operations proposed at that time and the incumbent PLCs, and noting the importance of the PLC operations in help-

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***FCC from p. 5***

ing maintain critical electric infrastructure." The FCC noted the potential for some limited amateur operations in this band under individual experimental licenses and observed that such operations would "allow empirical data to be developed on the sharing possibilities in this band for future consideration."

Now that 135.7-137.8 kHz is now allocated internationally to the Amateur Radio Service on a secondary basis in all ITU Regions, the FCC has concluded that "it is an appropriate time to re-examine the potential for shared Amateur Service-PLC use of this band." It stated in the *NPRM* that it is seeking comments on whether 135.7-137.8 kHz band should be allocated to the Amateur Service on a secondary basis in accordance with RR 5.67A.

"Because PLC systems operating under Section 15.113 of the rules serve important functions, such as tripping protection circuits if a downed power line or other fault is detected in the power grid, we would only consider adding an amateur allocation if we were comfortable that Amateur Radio and utility PLC systems could successfully coexist in this band," it stated in the *NPRM*. "We seek comment on the advantages and disadvantages, and other costs and benefits associated with changing our rules. For example, what benefits might accrue to the Amateur Radio community? To what extent do utilities deploy PLC systems on distribution lines in the 9-490 kHz band under our Part 15 rules, and how would those operations be affected were we to add a new secondary amateur radio service allocation in this band? What specific actions would PLC systems operators need to take if there were a secondary amateur radio service allocation in the band, and what are the associated costs?"

In addition, the FCC stated that is looking for comments on the whether the concept of requiring individual amateur stations to be "quasi-coordinated" for fixed use at a specific location still holds merit. The FCC did not pursue this option in 2003. "Are there other steps, such as limiting operating privileges in this frequency band (e.g., to Amateur Extra Class licensees) that would better facilitate amateur use of the band?" the FCC asked. "We also seek comment on the relevance of studies that discuss the potential for in-band Amateur Service radio transmitters to operate compatibly with PLC systems in light of any developments since our 2003 decision. In particular, we seek comment on the appropriate maximum field strength level and minimum separation distance from PLC systems for secondary Amateur Service operations in this band." ■

Brain Teaser answers: 1-b, 2-b, 3-a

# NASA PHONESAT COMING SOON TO HAM RADIO

***from AR Newsline***

Scientists at NASA's Ames Research Center have built the most affordable ham band satellite to date.

The $3,500 orbital device is a cubesat the size of a coffee cup that uses an off-the-shelf Nexus One smartphone as a central processor and an inexpensive off the shelf radio for communications with the ground.

Called PhoneSat 1, the tiny bird is scheduled to launch by the end of this year. Once on-orbit it will transmit back photos of Earth on an amateur radio band for 10 days, or until the battery dies.

Subsequent iterations will be capable of much more. For example, PhoneSat 2.0 will have a two-way S-band radio transponder which most satellites use to communicate with the ground and solar panels for extended life. More on PhoneSat 1 is on-line at tinyurl.com/phonesat-one. An overview of the entire NASA PhoneSat mission can be found at tinyurl.com/phone-sat-project. At the present, exact operating frequencies for these tiny birds have not been announced. ■

# 10 m is Hot!!

Ten meters -- in case you haven't heard, it's alive in a big way! That means that the ARRL 10 Meter Contest -- coming up the weekend of December 8-9--- is going to be the one of the best we've seen in years! During this event, many propagation modes will be available: Sporadic-E will help you work stateside stations, a touch of meteor scatter in the morning will give you split-second chances to work stations -- you'd better be quick, though! -- and DX stations will be plentiful, thanks to the return of F2 propagation.

Yes, 10 meters is back. During the CQ World Wide DX CW Contest this past Thanksgiving weekend, many stations worked more than 100 DXCC entities on 10 meters.

The ARRL Contest Branch Manager, KX9X, said that he keeps hearing from numerous hams who have been licensed only three or four years, telling him that they've never experienced a 10 meter opening before because they weren't licensed during the last solar cycle peak:

"A common phrase I'm hearing is, 'Now I understand what all the Old-Timers in my club were talking about -- 10 meters is great!' With a concentration of activity for the contest, there will be an opportunity for the first time in several years to experience the beauty of a wide-open 10 meter band.

With so much excitement worldwide over the great conditions, the 2012 ARRL 10 Meter Contest could see the highest level of participation in a very long time!" ■

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