# CQ CHATTER

OCTOBER 2016 VOLUME B16 •ISSUE 8

WOOD COUNTY AMATEUR RADIO CLUB



## Foxhunt Has Six Participants

The foxhunt for this year was held just after the September breakfast meeting at Frisch's Big Boy, on Saturday, Sept. 3. Bill, WD8JWJ, acted as the fox, and chose a very rustic setting for his lair.

The winner was Bob, WB8NQW, after 35 minutes. Second place went to Hoot, WB8VUL, followed by Team Magrum (Craig, NM8W, and Eban, KD8NJZ, and Zeke), Phil, W8PSK, Team Boughton (Bob, N1RB, and Linda, N1LB), and remote entrant, Jim, K8JU. This annual event is a good exercise in locating hidden transmitters, a skill that may come in handy some day. As always, a good time was had by all. ■

## Falling Out--100 W/Wire

***from ARNewsline***

If you enjoy operating at 100 watts or even less here's a high-powered event to enjoy with your low-power operation: The 100 Watts and a Wire ham radio community wants everyone to grab their portable radios and head outdoors on October 8th and 9th and get on the air.

The event is called FALLOUT. Operators are being encouraged to call "CQ 100 Watts and a Wire FALLOUT" on any and all bands. Whether the location is a city, state or national park, or somewhere else outdoors - and whether hams operate solo or as a group or club - the idea is to get outdoors while the temperatures are still friendly and listen for some friendly voices as well.

If you're a member of the 100 Watts and Wire community, exchange your 100 Watts ID numbers with one another.

If you're not a member of the community, participate anyway and collect QSOs with members. Fall will be getting under way - what better time to harvest a bumper crop of QSL cards? ■

## NET CHECK INS

***Sep 6 Traffic: 0***

***W8PSK (NCS)***
***KD8NJW***
***N8VNT***
***KC8EKT***
***KD8VWU***
***WB8NQW***
***N1RB***
***KE8CUZ/M***
***WD8JWJ***
***KE8CVA***
***KD8RNO***
***WD8LEI (12)***

***Sep 13 Traffic: 0***

***K8OVO (NCS)***
***KD8WZK***
***KD8RNO***
***N8VNT***
***W8PSK***
***KG8FH***
***WB8NQW***
***KE8CVA***
***WD8JWJ***
***KC8EKT***
***KD8VWU***
***WD8LEI***
***N8YAE.***
***(13)***

***Sep 20 Traffic: 0***

***WB8NQW (NCS)***
***KC8EKT***
***KE8CUZ***
***K8OVO***
***N8VNT***
***KD8NJW***

# BRAIN TEASERS

**1.** How can the bandwidth of a parasitic beam antenna be increased?

**a.)** use larger diameter elements

**b.)** use closer element spacing

**c.)** use traps on the elements

**d.)** use tapered diameter elements

**2.** If a net is about to begin on a frequency which you and another station are using, what should you do?

**a.)** as a courtesy, move to a different frequency

**b.)** increase your power so that all net participants can hear you

**c.)** transmit as long as possible on the frequency so that no one else can use it

**d.)** turn off your transceiver

**3.** When will a power source deliver maximum output to the load?

**a.)** when the load impedance is equal to the source impedance

**b.)** when the load resistance is infinite

**c.)** when the power supply fuse rating equals the primary winding current

**d.)** when air wound transformers are used instead of iron core transformers

# October Contests

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

| | | |
|---|---|---|
| **Oct 1-2** | *1600 to 2200 Z* | 160 m to 10 m |
| **California QSO Party** | | **all modes** |
| **Oct 8-9** | *0800 to 0800 Z* | 160 m to 10 m |
| **Oceania DX 'test** | | **CW** |
| **Oct 8-9** | *1600 to 2200 Z* | 160 m to 10 m |
| **Pennsylvania QSO Party** | | **all modes** |
| **Oct 8-9** | *1600 to 2359 Z* | 160 m to 10 m |
| **Arizona QSO Party** | | **all modes** |
| **Oct 15-16** | *0001 to 2359 Z* | 10 m |
| **10-10 Int'l Fall 'test** | | **CW** |
| **Oct 15** | *1400 to 2300 Z* | 160 m to 10 m |
| **Iowa QSO Party** | | **all modes** |
| **Oct 15-16** | *1400 to 0200 Z* | 160 m to 10 m |
| **New York QSO Party** | | **all modes** |
| **Oct 15-16** | *1800 to 1800 Z* | 160 m to 10 m |
| **South Dakota QSO Party** | | **all modes** |
| **Oct 16-17** | *1700 to 0100 Z* | 160 m to 10 m |
| **Illinois QSO Party** | | **all modes** |
| **Oct 17-21** | *1300 to 2359 Z* | 160 m to 6 m |
| **ARRL School Club Roundup** | | **CW SSB** |
| **Oct 22-23** | *1200 to 1200 Z* | 80 m to 6 m |
| **UK/EI DX 'test** | | **SSB** |
| **Oct 29-30** | *0000 to 2359 Z* | 160 m to 10 m |
| **CQ WWDX "test** | | **SSB** |

# Higher Bands Will Pick Up this Fall-- Data Suggest Smaller Solar Cycles Lie Ahead

***from ARRL News***

Propagation guru Carl Luetzelschwab, K9LA, says that, while conditions on 12 and 10 meters will pick up as they always do in the fall, F2 propagation on those bands will decline thereafter, with only sporadic E during the summer months as a possible saving grace. On the other hand, the lower bands — 160, 80, and 40 meters — should be good going forward, and 20 and 17 meters will be the mainstays of daylight HF propagation. Luetzelschwab made these observations during an August 23 World Wide Radio Operators Foundation (**WWROF**)-sponsored **webinar** "Solar Topics — Where We're Headed." He said data suggest that Cycle 24, the current solar cycle, will bottom out in 2020, and advised that radio amateurs may need to lower their expectations on the higher bands (and 6 meters) looking beyond that.

"I think the only conclusion we can make with some confidence is that we are headed for some small cycles," he told his audience. He cited various evidence related to the Sun's polar fields — which appear to be decreasing in strength, A index trends, and cosmic ray data to support his assertion. Luetzelschwab cautioned, however, that past performance does not necessarily predict future performance.

"There seems to be a good correlation between how long a solar minimum is and the next solar cycle," said Luetzelschwab. "The longer you spend at solar minimum, the smaller the next cycle."

He observed that hams active since the 1950s and 1960s have experienced short inter-cycle solar minimums of approximately 2 years, until the one between Cycle 23 and Cycle 24, which lasted about 4 years. He also allowed that the science is not fully understood, and that some things appearing to be patterns may just be coincidences.

On the other hand, he said, it looks like the downward trend of disappearing sunspots has leveled off, suggesting that Cycle 25 may see a lower smoothed sunspot number as opposed to zero or near-zero sunspots.

Counting those sunspots can be a subjective business. "That's a tough job," he said of the task, noting that it appears observer bias also has been a factor over the years, affecting historical sunspot data. "We now have new corrected data that are believed to be more accurate." Luetzelschwab's article "The New Sunspot Numbers," appearing in the October issue of *QST*, will discuss the new sunspot numbers.

Luetzelschwab cited historical sunspot cycle data going back cen-

***continued---on p.5***

## WCARC Weekly Net

**Tuesdays at 2100 all year**

**147.18 MHz 67 Hz PL**

**Net Control Roster**

| | |
|---|---|
| Oct 4 | KD8VWU |
| Oct 11 | KD8NJW |
| Oct 18 | NM8W |
| Oct 25 | W8PSK |
| Nov 1 | K8OVO |
| Nov 8 | WB8NQW |
| Nov 15 | N1RB |

## NEXT MEETING

***Business Meeting***

**Monday, October 10th**

**TIME: 7:30 pm/7:00 EB**

**PLACE:**

**Sheriff's Training Room**

**E. Gypsy Lane Rd.**

**& S. Dunbridge Rd.**

**Bowling Green, OH**

***solar---from p.4***

turies — including the "Maunder Minimum" of zero and near-zero sunspots between the years 1645 and 1715 and a later, less-drastic "Dalton Minimum." He pointed out that over the last 11,000 years, 19 notable grand maximums — including Cycle 19 and the cycles around it — and 27 notable grand minimums were recorded. "We're likely to have more of both grand maximums and grand minimums in the future," he predicted. The current system of numbering sunspot cycles begins with Cycle 1 in the mid-18th century.

"We don't fully understand the process inside the Sun that makes solar cycles," Luetzelschwab said. "Thus, you should exercise caution with statements seen in the news." ■

## Amateur Radio Parity Act Passes House

***from ARRL Letter***

*"The bill is passed without objection."* With those words, Amateur Radio history was made on September 12, when the US House of Representatives approved the Amateur Radio Parity Act, H.R. 1301 on a voice vote under a suspension of the rules. The focus of the campaign to enact the legislation into law now shifts to the US Senate.

The House victory culminated many years of effort on ARRL's part to gain legislation that would enable radio amateurs living in deed-

***continued---on p.6***

*Sep 20-continued*

***KD8RNO***
***KE8CVA***
***WD8JWJ***
***W8PSK***
***KD8VWU***
***N8PYA***
***N1RB***
***WD8LEI (14)***

*Sep 27 Traffic: 0*

***N1RB (NCS)***
***WB8NQW/M***
***KE8CUZ/M***
***N8VNT***
***KC8EKT***
***KD8NJW***
***KG8FH***
***KD8VWU***
***KE8CVA/M***
***W8PSK***
***WD8LEI (11)***

*Oct 4 Traffic: 0*

***KD8VWU (NCS)***
***K8BBK***
***KE8CUZ***
***N8VNT***
***WD8LEI***
***AA8HS***
***WB8NQW***
***KC8EKT***
***W8PSK***
***KE8CVA***
***N1RB***
***KG8FH***
***KD8NJZ (13)***

***parity---from p.5***

restricted communities to erect antennas that support Amateur Radio communication. The measure calls on the FCC to amend its Part 97 rules "to prohibit the application to amateur stations of certain private land-use restrictions, and for other purposes." While similar bills in past years gained some traction on Capitol Hill, it was not until the overwhelming grassroots support from the Amateur Radio community for H.R. 1301 shepherded by ARRL that a bill made it this far. The legislation faces significant obstacles to passage in the US Senate, however.

"This is huge step in our effort to enact legislation that will allow radio amateurs who live in deed-restricted communities the ability to construct an effective outdoor antenna," ARRL President Rick Roderick, K5UR, said. "Thanks to everyone for their help in this effort thus far. Now we must turn our full attention to getting the bill passed in the Senate."

ARRL Hudson Division Director Mike Lisenco, N2YBB, who chairs the ARRL Board's Legislative Advocacy Committee, has been heavily involved in efforts to move H.R. 1301 forward. "This has been a multi-year effort that is finally seeing some light," he said. "The passage of the bill in the House is a major accomplishment, due to the hard work of so many -- from the rank-and-file member to the officers and directors."

Lisenco said it's not a time to rest on our laurels. "We are only halfway there. The focus now shifts to our effort in the Senate," he said. "We are beginning a massive e-mail campaign in which we need every member to write their two Senators using our simplified process. You will be hearing from President Roderick and from your Directors, asking you to go to our Rally Congress page. Using your ZIP code, e-mails will be gen-

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***parity---from p.6***

erated much like our recent letter campaign. You'll fill in your name and address and press Enter. The e-mails will be sent directly to your Senators without you having to search through their websites."

Lisenco said getting these e-mails to members' Senators is a critical part of the process. "Those numbers matter! Please help us help you by participating in this effort," he said.

As the amended bill provides, "Community associations should fairly administer private land-use regulations in the interest of their communities, while nevertheless permitting the installation and maintenance of effective outdoor Amateur Radio antennas. There exist antenna designs and installations that can be consistent with the aesthetics and physical characteristics of land and structures in community associations while accommodating communications in the Amateur Radio services." ■

## AT&T's New "AirGig" Not Your Father's BPL

***from ARRL Letter***

Recalling the earlier efforts of the FCC and telecommunications and utility interests to roll out "Broadband over Powerline" (**BPL**), the Amateur Radio community has been buzzing with questions about AT&T's just-announced "**AirGig**" BPL plan to make broadband available via apparently similar technology. ARRL's earlier anti-BPL campaign, and market forces, eventually led to the demise of the prior BPL initiative. ARRL Laboratory Manager Ed Hare, W1RFI, who spearheaded the earlier effort to quantify BPL's threat to Amateur Radio's HF spectrum and remains the resident expert on the subject, said this newest BPL incarnation should *not* pose an interference issue for radio amateurs.

"This technology uses millimeter-wave RF signals (30 GHz to 300 GHz) coupled onto the surface of power lines to transmit the signal along the line with relatively low losses," Hare explained. "After looking at this technology, it looks nothing like the type of HF and VHF BPL that caused us so many problems years ago. The sky is not falling."

Hare added that it is not likely that the AT&T technology will even use Amateur Radio bands, so there is little reason for concern even among those amateurs who use spectrum above 24 GHz.

According to AT&T's September 20 announcement, the company is "deep in the experimentation phase" of the developing technology, which it says would be "easier to deploy than fiber, can run over license-free spectrum, and can deliver ultra-fast wireless connectivity to any home or handheld wireless device." AT&T said its initial — and continuing —

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Brain Teaser answers: (G) 1-a, 2-a, 3-a

# October Hamfests

**October 23 Massillon ARC. Annual Hamfest**. Massillon Boys and Girls Club, Massillon, OH.
**web: http://www.w8np.org**

**October 30 USECA. Annual Hamfest**. United Food and Commercial Workers Convention Hall, Madison Heights, MI.
**web: http://usecaarc.com**

**DON'T FORGET!**
**10 meter informal net meets Sunday@ 2030 year round on 28.335 MHz**

**Program Note for Oct. 10:**
**Phil, W8PSK, will present pictures of his western tour last summer**

***BPL---from p.6***

testing at AT&T outdoor facilities "has been positive," and initial field trials are set to begin in 2017.

Hare said the technique of putting RF signals onto the surface of conductors is not new. An **article** by Glenn Elmore, N6GN, and John Watrous, K6PZB, appeared in the May/June issue of *QEX,* describing the technique. In January 1953, the *Proceedings of the IRE* featured an article by C. E. Sharp and G. Goubau, "A UHF Surface-Wave Transmission Line," and the *Radio Amateurs VHF Manual 11th edition* introduced the technique to amateurs in 1968.

Hare said the League will keep an eye and ear out for interference problems, but he believes that the frequencies involved and the fact that these signals should not propagate far from the lines will pose little risk to the Amateur Radio Service.

"So far, industry has not found a way to reliably put broadband signals on wires intended to carry power frequencies," he said. "The technical difficulties of trying to use wiring not designed to carry RF signals [and] connected to all sorts of noisy loads, other conductors and even splices that are major discontinuities at these frequencies will probably prove to be quite the technical challenge. ARRL is interested in seeing all technology succeed, but its vested interest is in the interference potential of new technologies. Fortunately, in this case, there is little likelihood of interference." ■

I have an older (1969 ) vintage solid state audio amplifier that has a problem. I don't remember if it's the left or the right channel, but one of them will pop and crackle while the other side is perfectly quiet. I did once try to have the unit repaired and it worked for a short time but the noise has returned. The unit is a Sansui solid state with several inputs including tape head and magnetic phono pickups.

I have no real reason to keep the unit and am downsizing, but don't want to throw it in the trash. (I'm a bit sentimental). Purchased while in the Navy overseas and had lots of good music go thru it.

I am willing to donate the unit to someone who would fix and use it.

The amp comes with operations manual and schematic.

Chuck Dicken - WD8ICP
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