CQ CHATTER

NOVEMBER 2016 VOLUME B16 •ISSUE 9

WOOD COUNTY AMATEUR RADIO CLUB

President	WB8NQW	Bob Willman
Co-Vice Presidents	K8BBK	Steve McEwen
	W8PSK	Loren Phillips
Secretary	N1RB	Bob Boughton
Treasurer	KD8NJW	Jim Barnhouse

http://wcarc.bgsu.edu

Minutes

WCARC Meeting

October 10, 2016

Bob-WB8NQW, presiding

Present: N1RB-Bob, K8LD-Mark, KB8RT-Lee, WD8JWJ-Bill, KE8CVA-Terry, K8LL-Stan, K8JU-Jim, WD8LEI-Eric, WB8VUL-Hoot, KD8VWU-Doug, W8PSK-Phil, WB8NQW-Bob

Meeting called to order: at 7:30 with Pledge of Allegiance.

Minutes of August meeting approved unanimously.
No **Treasurer's Report** presented.

Old Business:

- Bill (JWJ) reported on the Foxhunt. He acted sneakily (like a fox) by heading west after the breakfast meeting, then circling around to his intended lair at the dead end of Linwood Rd. There were 5 teams with 8 participants in total.

- Bob (NQW) reported on what needs to be done to finish the station installation at the BiG FabLab. For VHF/UHF, a transceiver has been donated by W8PSK. What is needed is to mount an antenna outside. Eric (LEI) mentioned that there are some J-Poles available and he would contribute one. The other thing that is needed is to drill a hole through the wall to accommodate the feed lines. As for HF, the plans for a loop antenna are still in the initial stages. Jerry (K7JWW) has donated a Kenwood TS-530 for use.

- The Nominating Committee (RB & LB) have partially completed the officer slate, but are still looking for a volunteer to take on the President position. Don't be sur-

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NET CHECK INS

Oct 11 Traffic: 0

KD8NJW (NCS)
N8VNT
KE8CUZ
W8PSK
KD8RNO
KC8EKT
WD8LEI
N1RB
KD8VWU
WB8NQW
KE8CVA
WD8ICP
KC8NKC (13)

Oct 18 Traffic: 0

NM8W (NCS)
K8BBK
KA8VNG/P
N8YAE
KD8RNO
N8PYA
KD8NJW
WD8LEI
WB8NQW
N1RB
KE8CVA
KG8FH/P
KD8VWU
WD8ICP
KD8HMO/M (15)

BRAIN TEASERS

1. What is the result of the skin effect?

a.) as frequency increases, rf current flows in a thinner layer of the conductor near surface

b.) as frequency decreases, rf current flows in a thinner layer of the conductor near surface

c.) thermal effects on the conductor surface increase the impedance

d.) thermal effects on the conductor surface decrease the impedance

2. What are the two families of circles that make up a Smith Chart?

a.) resistance and voltage

b.) reactance and voltage

c.) resistance and reactance

d.) voltage and impedance

3. What is a linear transponder?

a.) a repeater that passes only linear or CW signals

b.) a device that receives and retransmits signals of any mode in a certain passband

c.) an amplifier that varies its output linearly in response to input signals

d.) a device which responds to satellite tele-commands and is used to activate a linear se-quence of events

November Contests

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

Nov 5-6	*1200 to 1200 Z*	160 m to 10 m
Ukrainian DX 'test		**CW SSB**
Nov 5-7	*2100 to 0300 Z*	160 m to 10 m
ARRL Sweepstakes		**CW**
Nov 12-13	*0000 to 2359 Z*	80 m to 10 m
WAE(urope) DX 'test		**RTTY**
Nov 12-13	*1200 to 1200 Z*	160 m to 10 m
OK/OM (Czech Rep.) DX 'test		**CW**
Nov 12-13	*1400 to 0200 Z*	*160* m to10 m
Kentucky QSO Party		**all modes**
Nov 19-20	*1200 to 1200 Z*	80 m to 10 m
LZ (Bulgaria) DX 'test		**CW SSB**
Nov 19-21	*2100 to 0300 Z*	160 m to 10 m
ARRL Sweepstakes		**SSB**
Nov 26-27	*0000 to 2359 Z*	160 m to 10 m
CQ WW DX 'test		**CW**

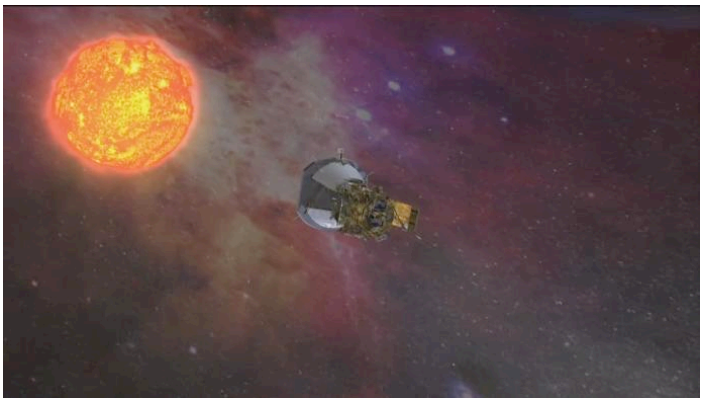
November Hamfests

November 12-13 Allen County AR Technical Society. Annual Fort Wayne Hamfest and Computer Expo. Allen County War Memorial Coliseum, Fort Wayne, IN.
web: **http://www.fortwaynehamfest.com**

December 4. L'Anse Creuse Annual Hamfest. Madison Place, Madison Heights, MI. **web:** **http://n8lc.org**

NASA Scientists Study Solar Activity

from WHSV-Harrisonville, VA



Ten years ago, on Oct. 25, NASA launched twin satellites into orbit, giving them the first 360-degree view of the sun at one time. Called the 'STEREO' probes, these spacecraft have helped scientists better understand how the sun affects earth and the rest of the solar system.

NASA is particularly interested in solar storms, known as coronal mass ejections, which occur as flares or eruptions on the surface of the sun. These storms can travel through space, and even affect life and technology here on earth. "We're pretty well protected down here on Earth, we have our atmosphere and our magnetic field, they protect us," said Dr. Terry Kucera, NASA Scientist. "But this space weather can affect our technologies. It can affect power grids, communications, space craft, astronauts even. So now that we're in the Space Age, we have to start paying attention to these things."

A new solar probe will be launched in 2018, which will orbit 4-million miles from the surface of the sun; 25x closer than from earth. While the new probe will give scientists the closest view of the sun yet, the information gained will be combined with other missions to help better understand solar storms. "Where we really get information is from all the different missions we have in different parts of the solar system and bringing all that data together, said Dr. Kucera. "To bring an overall view and understanding of what these solar storms are like, and that's helping us understand them better all the time."

The current solar probes use a disk to cover the bright sun so that scientists can study its atmosphere, something that will happen naturally in August 2017 with the total solar eclipse. The event will not only give us an opportunity to enjoy a rare view of the sun, but NASA scientists a window to better study it. ■

SOHO-The Solar & Heliospheric Observatory

Amateurs who work HF and even VHF have an intense interest in the behavior of the Sun. If you fall into this category, you might be interested in SOHO, the Solar & Heliospheric Observatory. **SOHO** is a project of international collaboration

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WCARC Weekly Net

Tuesdays at 2100 all year

147.18 MHz 67 Hz PL

Net Control Roster

Nov 1	K8OVO
Nov 8	WB8NQW
Nov 15	N1RB
Nov 22	KD8VWU
Nov 29	KD8NJW
Dec 6	NM8W
Dec 13	W8PSK

NEXT MEETING

Breakfast Meeting

Saturday, Nov. 5th

TIME: 9:00 am

PLACE:

Frisch's Big Boy

N. Main St. &

E. Poe Rd.

Bowling Green, OH

minutes---from p.1

prised if you receive a cajoling phone call in the next month.

New Business:

- Bob mentioned that plans must be made for the January kick-off banquet. Because of the good experience last year, he suggests the French Quarter on Sunday, January 8th. Bob (RB) moved and (VUL) seconded. The motion passed unanimously.

- Eric (LEI), Wood Co. EC, gave a brief report on Wood County ARES. ID badges are available to all members who had their pictures taken. For any prospective ARES members who wish to join, he requests that they submit a completed application form and line up a time with Deputy Shirley to have the badge photo taken. Eric also mentioned that he is the owner of a new Rig X-pert antenna analyzer and has been trying it out on the antennas at the Sheriff's office. He is still on a learning curve however.

- Bob reminded everyone that the next meeting is a breakfast meeting on November 5th.

Meeting Adjourned at 8:05 pm. The business meeting was followed by a slide presentation by Phil, W8PSK, on his western trip to numerous national parks and other scenic locations over the summer. ■

Oct 25 Traffic: 0

WB8NQW (NCS)
WD8LEI
WD8JWJ
N1RB
N8VNT
KG8GH
KD8VWU
K8BBK
KE8CVA
KA8VNG
K8JU
KD8RNO
KC8EKT (14)

Nov 1 Traffic: 0

K8OVO (NCS)
N1RB
K8JU
KC8EKT
WB8NQW
W8PSK
WD8LEI
K8BBK
N8VNT
KD8RNO
KG8FH
KD8VWU
KA8VNG
KE8CUZ
WD8ICP
KE8EZT
KD8BIN
KE8CVA (18)

SOHO---from p.4

between **ESA** and **NASA** to study the Sun from its deep core to the outer corona and the solar wind.

SOHO was launched on December 2, 1995. The SOHO spacecraft was built in Europe by an industry team led by prime contractor Matra Marconi Space (now EADS Astrium) under overall management by ESA. The twelve **instruments** on board SOHO were provided by European and American scientists. Nine of the international instrument consortia are led by European Principal Investigators (PI's), three by PI's from the US. Large engineering teams and more than 200 co-investigators from many **institutions** supported the PI's in the development of the instruments and in the preparation of their operations and data analysis. NASA was responsible for the launch and is now responsible for mission operations. Large radio dishes around the world which form NASA's **Deep Space Network** are used for data downlink and commanding. Mission control is based at **Goddard Space Flight Center** in Maryland.SOHO has provided an unprecedented breadth and depth of information about the Sun, from its interior, through the hot and dynamic atmosphere, to the solar wind and its interaction with the interstellar medium. These findings have been documented in an impressive, still growing body of scientific and popular literature.

Some of the key results include:

Brain Teaser answers: (E) 1-a, 2-c, 3-b

continued---on p.7

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

SOHO---from p.6

- Revealing the first images ever of a star's convection zone (its turbulent outer shell) and of the structure of sunspots below the surface.
- Providing the most detailed and precise measurements of the temperature structure, the interior rotation, and gas flows in the solar interior.
- Measuring the acceleration of the slow and fast solar wind.
- Identifying the source regions and acceleration mechanism of the fast solar wind in the magnetically "open" regions at the Sun's poles.
- Discovering new dynamic solar phenomena such as coronal waves and solar tornadoes.
- Revolutionizing our ability to forecast space weather, by giving up to three days notice of Earth-directed disturbances, and playing a lead role in the early warning system for space weather. Monitoring the total solar irradiance (the 'solar constant') as well as variations in the extreme ultra violet flux, both of which are important to understand the impact of solar variability on Earth's climate.

For amazing views of our Sun, visit the SOHO website current movies and images at:
https://sohowww.nascom.nasa.gov/data/realtime-images.html ■

Broadcasters & Jammers on Amateur Frequencies

from ARRL Letter

The battle continues between Radio Eritrea (Voice of the Broad Masses) and Radio Ethiopia, which is said to be jamming the Eritrean broadcaster with broadband white noise. The problem for radio amateurs is that the battle is taking place in the 40 meter phone band — 7.145 and 7.175 MHz — with the jamming signal **reported** by the IARU Region 1 Monitoring System (IARUMS) to be 20 kHz wide on each channel.

The on-air conflict has been going on for years; Ethiopia constructed new transmitting sites in 2008 and is said to use two or three of them for jamming purposes. The interfering signals can be heard in North America after dark. According to IARUMS Region 1 Coordinator Wolf Hadel, DK2OM, Radio Eritrea is airing separate programs on each frequency. He said in the IARUMS September newsletter that telecommunications regulators in Germany, Austria, and Switzerland have been informed, so they could file official complaints.

Other AM broadcast intruders on 40 meters include Radio Hargeisa in Somaliland on 7.120 MHz, which, Hadel said, is even audible in Australia and Japan. He further reports that the Voice of Iran's signal on 7.205 MHz is splattering up to 5 kHz on either side of its channel. ■

FREE: Vintage (1969) Sansui solid state audio amplifier that has a problem. Has several inputs, including tape head and magnetic phono pickups. 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.
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.

Willing to donate the unit to someone who would fix and use it.

The amp comes with operations manual and schematic.

Chuck Dicken, WD8ICP
dicken@bgsu.edu or 419-308-0146

FOR SALE: LDG Z11 Pro 2 Autotuner---in perfect working condition with no cosmetic flaws I'm aware of.

ASKING: $135

CONTACT: Craig Magrum, NM8W
nm8w@arrl.net or (419) 308-4248

WOOD COUNTY ARC
P.O.BOX 534
BOWLING GREEN, OH
43402