CQ CHATTER

VOLUME B11 • Issue #10 WOOD COUNTY AMATEUR RADIO CLUB NOVEMBER 2010
P.O. BOX 534, Bowling Green, OH http://wcarc.bgsu.edu

Minutes

WCARC Meeting

October 11, 2010

thanks to WB8VUL for taking minutes while Secretary was absent

Meeting called to order at 7:30 pm.
Pledge of Allegiance.
Secretary Report approved. Treasurer report approved.

Old Business:

- Motion to keep breakfast location at Edgewood Inn in Pemberville until further notice. Motion passed.
- QST subscription for the Wood County Library---W8PSK forgot but will pursue this month.
- Report on consideration of tower restrictions in BG City Council by W8PSK.
  - W8PSK was not allowed to speak to the issue but heard many incorrect statements.
  - motion died in Council
  - W8PSK is pursuing another avenue. He plans to do some ground work with Planning Commission members prior to the next meeting in November or December.
  - He encouraged everyone to contact your State Representative to pass HB 212 during this session, which ends in December.

New Business:

- A suitable January kick off banquet location will be investigated by Steve, K8BBK, and Bill, WD8JWJ.

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WCARC Weekly Net:
Tuesdays at 2130 EDST
(0130 Z year-round)
147.18 MHz 67 Hz PL

Next Meeting
BREAKFAST
Saturday, November 6th
TIME: 9:00 am
PLACE: Edgewood Inn
Rts. 6 and 199
Pemberville

Net Check Ins

October 5

N8QMV (NC)
W8PSK
KD8NJZ
WD8JWJ
WB8NQW
K8NEA
N1RB
N1LB
K3ITV
K8OVO (10)

October 12

WB8NQW (NC)
WD8JWJ
W8PSK
WD8LEI
WB8VUL
K8BBK
WA8ANF
KD8JHN
N8RTO (9)

October 19

N1RB (NC)
KD8NJZ
WD8JWJ
WB8VUL
WB8NQW
N8YAE
N8RTO/Doug
K8OVO
AF8N/Jerry
WA8ANF/Dick (10)

WCARC

2 m Net Control Roster

Net meets every Tuesday at
2130 EDST/0130 Z--*2030 EST

Nov	**2**	**KD8NJZ**
Nov	**9***	**N8QMV**
Nov	**16***	**WB8NQW**
Nov	**23***	**N1RB**
Nov	**30***	**K8OVO**
Dec	**7***	**N8QMV**
Dec	**13***	**WB8NQW**

Brain Teasers

1. What type of transmission is indicated by the term NTSC?

a.) a Normal Transmission in a Static Circuit
b.) a special mode for earth satellite uplink
c.) an analog fast scan color TV signal
d.) a frame compression scheme for TV signals

2. What component is commonly used to change 120 Vac house current to a lower ac voltage for other uses?

a.) variable capacitor b.) transformer
c.) transistor d.) diode

3. Which of the following circuits demodulates FM signals?

a.) limiter
b.) discriminator
c.) product detector
d.) phase inverter

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 6-7	*1200 to 1200 Z*	160 m to 10 m
Ukrainian DX 'test		**SSB**
Nov 6-8	*2100 to 0300 Z*	160 m to 10 m
ARRL Sweepstakes		**CW**
Nov 13-14	*0000 to 2400 Z*	80 m to 10 m
Worked All Europe		**digital**
Nov 13-14	*1200 to 1200 Z*	80 m to 10 m
Japan Int'l DX 'test		**SSB**
Nov 13-14	*1200 to 1200 Z*	160 m to 10 m
OK-OM (Czech/Slovak) DX 'test		**CW**
Nov 13-14	*1400 to 0200 Z*	160 m to 10 m
Kentucky QSO Party		**all modes**
Nov 20-21	*0000 to 2359 Z*	80 m to 10 m
Mongolia DX 'test		**all modes**
Nov 20-21	*1200 to 1200 Z*	80 m to 10 m
LZ (Bulgaria) DX 'test		**all modes**
Nov 20-22	*2100 to 0300 Z*	160 m to 10 m
ARRL Sweepstakes		**SSB**
Nov 20-21	*2100 to 0100 Z*	160 m
RSGB 1.8 MHz 'test		**CW**
Nov 27-28	*0000 to 2400 Z*	160 m to 10 m
CQ WW CW 'test		**CW**

November Hamfests

Nov 13-14 **Allen County AR Technical Society.** Fort Wayne Hamfest and Indiana State Convention. Allen County War Memorial Coliseum, Ft. Wayne, IN. Contact James, KB9IH, (260) 579-2196
e-mail: chairman@fortwaynehamfest.com
web: http://fortwaynehamfest.com

DON'T FORGET! 10 meter informal net

meets each Sunday at 2030 EST

on 28.335 MHz

Letter from the President

November 2010

Thanks to Bob, W8NYY, for a very interesting demo on the capabilities of the RACES traffic handling system at the October meeting. He has put a lot of time and effort into a system we hope we never need.

My request for volunteers to serve on the nominating committee was followed by almost total silence. Most of the present officers volunteered to serve another term so the election may be very short. Maybe I should appoint a nominating committee in April or May so they have plenty of time to twist arms.

Bill, WD8JWJ, and Steve, K8BBK, are seeking a location for the January kickoff banquet. If you have any location in mind please let them know.

At The October meeting we assembled a list of club assets that are temporarily being held by some club members. If you have club equipment and were not able to be at the meeting get your list to me either via e-mail, snail mail or an eyeball QSO.

The next breakfast is November 06, at Edgewood. The next business meeting is December 13, at the Sheriff's Office. See you there.

73

Bob WB8NQW ■

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

minutes---from p.1

- Bob, WB8NQW called for volunteers to serve on the Nominating Committee. JWJ said he was willing to serve another year and the other officers followed suit---no Nominating Committee is necessary.
- New License Class---no report
- KB8UMN/SK (Brett Luna) repeater---Jim, K8JU, is trying to get the antenna higher. He reported that he needs to do some other work also.
- ARES/K8TIH interference---There has been a problem in getting the crystals. JU is looking for another supplier.
- Equipment Inventory---NQW reported that lots of stuff has been listed. The problem remains on what to do with it.

Announcements:

✦Next Club breakfast at Edgewood Inn on November 6th.

✦Next business meeting at Sheriff's Training Room on December 13th.

✦Meeting adjourned at 8:00 pm.

Bob, W8NYY, presented a very interesting demonstration of Winlink, a hybrid e-mail system using amateur radio and the internet. ■

Propagation-Report October 23rd

from ARRL News

The average sunspot numbers for the week were up nearly 44 points to 55.6, while the average solar flux readings remained unchanged, at 84.9. For a few days, solar flux values rose above 90, but currently the projection from USAF and NOAA for solar flux over October 22-31 is 82, 82, 82, 82, 80, 80, 80, 80, 80 and 80. The same forecast predicts planetary A index for the same period at 5, 10, 15, 12, 5, 5, 5, 5, 7 and 7. Geophysical Institute Prague predicts quiet conditions on October 22, quiet to unsettled October 23, unsettled October 24-25 and quiet October 26-28.

Seven new sunspot groups arrived this month: group 1112 appeared October 9; group 1113 on October 13; groups 1114 and 1115 on October 14; group 1116 on October 17, and groups 1117 and 1118 on October 19. While the average sunspot number for the past week was 55.6, the greatest sunspot activity was over the past few days with the daily sunspot numbers on October 17-20 at 61, 69, 65 and 61. Sunspot numbers for October 14-20 were 34, 51, 48, 61, 69, 65 and 61, with a mean of 55.6. The 10.7 cm flux was 80.4, 82.2, 86.9, 83.6, 90.6, 86.6 and 83.9, with a mean of 84.9. The estimated planetary A indices were 2, 5, 6, 11, 5, 5 and 4, with a mean of 5.4. The estimated mid-latitude A indices were 0, 3, 3, 10, 3, 7 and 3, with a mean of 4.1.

Check the new November issue of *WorldRadio Online* for two articles of interest concerning propagation. The first is a piece beginning on page 14 about gray line propagation, and on page 38 is Carl Luetzelschwab's, K9LA, excellent monthly Propagation column. This

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propagation---from p.6

month, Carl addresses questions that arose when news articles appeared describing a shrinking thermosphere. Did this affect propagation? Carl's data shows that it probably did not.

Last week's bulletin mentioned the *WSPR* program and the article about it on page 30 in the November 2010 issue of *QST*. A useful tool generated by this network is the map. You can look at weak-signal propagation over all bands for the past 24 hours, or look at any of the dozen individual amateur bands from 2 to 160 meters, plus VLF. You can limit your view down to 30 minutes, 1 hour, 3 hours, 6 hours, 12 hours or 24 hours. *WSPR* is not a mode where you can converse with other stations, but rather an automated network that picks up weak signals from other stations in the network and displays the propagation paths. Because it is effective with such weak signals, it isn't clear how this might be used to indicate a possible path for an SSB QSO, for example.

Jim Muiter, N6TR, of San Mateo, California, said that on Thursday morning, he picked up the 10 meter NCDXF beacon in South Africa, ZS6DN, around 1700 and it disappeared a few hours later. In the past, this has been an indicator of improving conditions. Northern California DX Foundation operates beacons worldwide on 10, 12, 15, 17 and 20 meters. These are very useful for determining when the bands are open. ■

Whither FCC Decency Rules?

from AR Newsline

With the Federal courts having recently struck down the FCC's policy on broadcast indecency, many are wonder what impact if any that decision will have on the prosecution of wayward members of the ham radio community. Now, writing in his Washington Readout column in the October issue of CQ Magazine, columnist Fred Maia, W5YI, confronts this issue head on.

In his article, W5YI notes that in the past, the FCC has held that the indecency rules applying to radio and television broadcasting also applied to amateur radio transmissions. That in making obscenity or indecency determinations that the FCC staff analyzes what was actually said. If the FCC determines that the curse words transmitted actually violate its rules, it can issue a Notice of Apparent Liability or N-A-L which is a preliminary finding that the rules have been violated.

But says Maia, to date the FCC has never issued a citation or a N-A-L to a ham radio operator for solely violating its obscenity or indecency rules. The violation notice usually mentions other accompanying offenses which can be easily proven and do not involve controversial First Amendment issues.

Fred Maia is not an attorney but is a longtime FCC watcher and writer. He also possesses a very good understanding of communications law and has the ability to make it understandable to the general ham radio public. And he does that very well. ■

Breaking News: The Sun Worked 175 Years Ago!

from Universe Today by J. Voisey

You'll have to forgive the title. After writing so many articles as moderately as I could, I couldn't help but engage in a bit of sensationalism of my own, especially in the interest of sarcasm. Although it's not especially exciting that the sun has indeed been working for nearly two centuries (indeed, much longer than that), what *is* interesting is how using historical data, scientists have confirmed that process we see today have been relatively consistent since 1825.

The observations revolve around a familiar diagram known as the Butterfly diagram (pictured below). This diagram depicts the position of sunspots at various latitudes on the sun's surface as time progresses. At the beginning of a cycle, sunspots start of at high latitudes and as the cycle progresses, appear at lower and lower latitudes until they disappear and the cycle repeats. The pattern formed resembles the wings of a butterfly, thereby giving the diagram its name.

Although sunspots have been observed as far back as 364 BC by Chinese astronomers, telescopic observations of them did not start until the early 1600's. Continuous observation of the sun and its spots started in 1876 at the Royal Greenwich Observatory. There Edward Maunder recognized the pattern of sunspots and published them in the format that is the now famous Butterfly diagram in 1904. The diagram, as its usually shown only comprises data starting from around 1876 and continuing until present day. But the use of new records have extended the diagram back an additional 51 years, covering four new solar cycles. Although many observations exist with total sunspot *counts*, this new set of data includes detailed documentation of the position of the spots on the solar disc.

The observations were created by German astronomer Heinrich Schwabe. Originally an apothecary, he won a telescope in a lottery in 1825 and was fascinated, selling his family business four years later. Schwabe observed the Sun compulsively attempting to discover a new planet with an orbit interior to Mercury by witnessing it transiting the Sun. Although this effort was doomed to failure, Schwabe maintained detailed records of the sunspots. He even recognized the pattern of spots occurred in an 11 year cycle and published the discovery in 1843. It was met with little attention for several years until it was included in Al-

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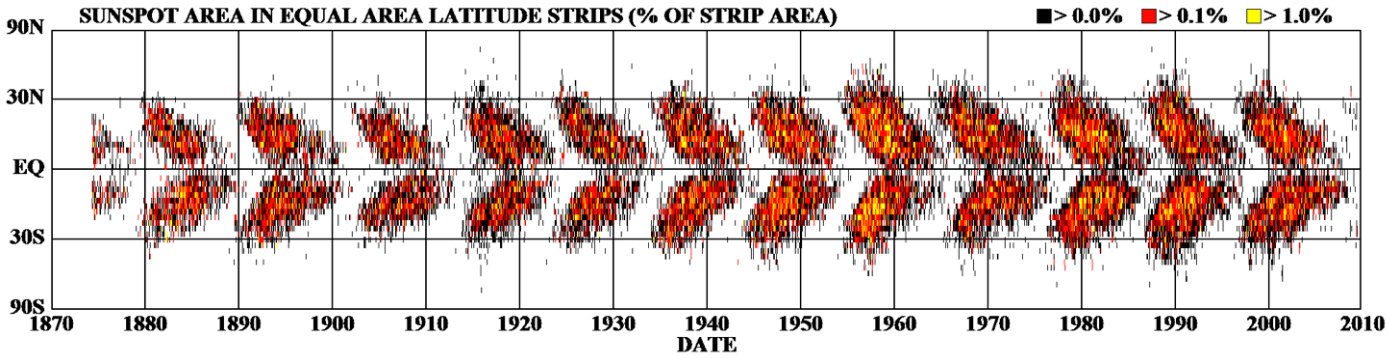
Sun--from p.8

exander von Humboldt's *Kosmos*. Due to this discovery, the 11 year solar cycle is also referred to as the Schwabe cycle.

From 1825 until 1867, Schwabe compiled at least 8468 observations of the Sun's disc, drawn on 5cm circles. On his death, these documents, as well as the rest of his scientific works, were donated to the Royal Astronomical Society of London, and in 2009, were provided to a team of researchers for digitization. From the 8468 drawings, 7299 "have a coordinate system which is found to be aligned with the celestial equator" making them suitable for translation into scientific data.

Thus far, the team has converted 11% of the images into usable data and already, it has created a detailed butterfly diagram preceding those produced elsewhere. From it, the astronomers undertaking the conversion have made some interesting observations. The cycle beginning around 1834 was weaker than others around that time. The following one, starting around 1845, displayed a notable asymmetry where sunspots in the southern hemisphere were conspicuously lacking for the first 1-2 years of the cycle, whereas most cycles are fairly well mirrored. Although unusual, such phase shifts are not unprecedented. In fact, another study using historical records has demonstrated that, for the last 300 years, one hemisphere has always led (although not usually so greatly) for several cycles before trading off.

As with the recently discussed historical project on weather trends this reanalysis of historical data is one of many such projects giving us a broader picture of the trends we see today and how they have changed over time. While undoubtedly, many will be demonstrated to be mundane and familiar, undeserving of the exaggerated significance of my title, this is how science works: by expanding our knowledge to test our expectations. ■



The sunspot butterfly diagram. This modern version is constructed (and regularly updated) by the solar group at NASA Marshall Space Flight Center.

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