

CQ Chatter

OCTOBER 2020

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WOOD COUNTY AMATEUR RADIO CLUB

President	WB8NQW	Bob Willman
Vice President	KD8VWU	Doug Perez
Secretary	N1RB	Bob Boughton
Treasurer	KD8NJW	Jim Barnhouse
Board Member	KE8CVA	Terry Halliwill

New Venue for October Meeting

Some good news to report regarding the upcoming Business Meeting of WCARC. Bob, WB8NQW, has secured a real (not virtual) meeting place for the Club. The October meeting will be held at the Woodland Mall Food Court on Oct. 12 at 7:30 pm. Masks are mandatory in the mall—hope to see you there! ■

ISS Voice Repeater is QRV!

by fkemmerer -AB10C

Thanks to some great work by the ARISS Team, a new Voice Repeater system is operating on the International
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Remember Hara Arena?

Those of us who fondly remember visiting the Dayton Hamvention in past years will recall the cachet of visiting the old venue, Hara Arena. This facility had served as the locale for the Hamvention for many decades before it went bankrupt and was razed to the ground.

Nobody can forget the faint sweaty locker room odor of the old hockey arena, as well as the multitude of auxiliary buildings which formed a sort of a rat's maze for the attendees to navigate in order to visit all the Hamvention booths.

Craig, NM8W, recently visited the site with his family, and was able to launch his photo-drone and take a few shots of what the site looks like at present. Try not to shed a tear! Go to: https://youtu.be/91tSYa_9kE0 ■

Net Check Ins

Sep 8

Traffic: 0

KD8NJW (NCS)

NM8W

K8BBK

KG8FH

W8PSK

WB8NQW

KE8PDS

KB8QEW

KD8RNO

WE8TOM

KA8VNG

N1RB

KE8CVA

KE8NEC

WD8ICP

KE8CUZ (16)

Sep 15

Traffic: 2

KG8FU (NCS)

WD8LEI

KD8RNO

K8BBK

KE8CVA

KC8EKT

WB8NQW

K8DLF

W8PSK

NM8W

WE8TOM

KA8VNG

N8VNT (13)

Sep 22

Traffic: 0

N1RB (NCS)

KE8CVA

WD8ICP

KG8FH

K8DLF

KE8PJM

WB8NQW

BRAIN TEASERS

1. How does a network transform one impedance to another ?
 - a.) it introduces negative resistance to cancel the resistive part of an impedance
 - b.) it introduces transconductance to cancel the reactive part of an impedance
 - c.) it cancels the reactive part of an impedance and changes the resistive part
 - d.) network resistances substitute for load resistances
2. What is the deviation ratio of an FM phone signal having a maximum frequency swing of plus or minus 5 kHz and accepting a maximum modulation rate of 3 kHz?
 - a.) 60
 - b.) 0.16
 - c.) 0.6
 - d.) 1.66
3. What information is needed to accurately evaluate the gain of an antenna?
 - a.) radiation resistance
 - b.) E-field and H-field patterns
 - c.) loss resistance
 - d.) all of the above

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 3-4 Oceania DX 'test	<i>0600 to 0600 Z</i>	160m to 10 m SSB
Oct 3-4 Russian WW Digital 'test	<i>1200 to 1159 Z</i>	160 m to 10 m digital
Oct 3-4 California QSO Party	<i>1600 to 2200 Z</i>	160 m to 10 m all modes
Oct 4 RSGB DX 'test	<i>0500 to 2300 Z</i>	80 m to 10 m CW/SSB
Oct 10-11 Nevada QSO Party	<i>0300 to 2100 Z</i>	160 m to 10 m all modes
Oct 10-11 Oceania DX 'test	<i>0600 to 0600 Z</i>	160 m to 10 m CW
Oct 10-11 Arizona QSO Party	<i>1500 to 0459 Z</i>	160 m to 10 m all modes
Oct 10-11 Pennsylvania QSO Party	<i>1600 to 2200 Z</i>	160 m to 10 m all modes
Oct 10-11 South Dakota QSO Party	<i>1800 to 1800 Z</i>	160 m to 10 m all modes
Oct 17-18 New York QSO Party	<i>1400 to 0200 Z</i>	160 m to 10 m all modes
Oct 17-18 Worked All Germany 'test	<i>1500 to 1459 Z</i>	80 m to 10 m CW/SSB

New Sunspot Cycle Begins

from NASA

Solar Cycle 25 has begun. During a media event on Tuesday, September 15, experts from NASA and the National Oceanic and Atmospheric Administration (NOAA) discussed their analysis and predictions about the new solar cycle – and how the coming upswing in space weather will impact our lives and technology on Earth, as well as astronauts in space.

The Solar Cycle 25 Prediction Panel, an international group of experts co-sponsored by NASA and NOAA, announced that [solar minimum occurred in December 2019](#), marking the start of a new solar cycle. Because our Sun is so variable, it can take months after the fact to declare this event. Scientists use sunspots [to track solar cycle progress](#); the dark blotches on the Sun are associated with solar activity, often as the origins for giant explosions – such as solar flares or coronal mass ejections – which can spew light, energy, and solar material into space.

“As we emerge from solar minimum and approach Cycle 25’s maximum, it is important to remember solar activity never stops; it changes form as the pendulum swings,” said Lika Guhathakurta, solar scientist at the Heliophysics Division at NASA Headquarters in Washington.

NASA and NOAA, along with the Federal Emergency Management Agency and other federal agencies and departments, work together on the [National Space Weather Strategy and Action Plan](#) to enhance space weather preparedness and protect the nation from space weather hazards. NOAA provides space weather predictions and satellites to monitor space weather in real time; NASA is the nation’s research arm, helping improve our understanding of near-Earth space, and ultimately, forecasting models.

Space weather predictions are also critical for supporting [Artemis](#) program spacecraft and astronauts. Surveying this space environment is the first step to understanding and [mitigating astronaut exposure](#) to space radiation. [The first two science investigations](#) to be conducted from the Gateway will study space weather and monitor the radiation environment in lunar orbit. Scientists are working on predictive models so they can one day forecast space weather much like meteorologists forecast weather on Earth.

“There is no bad weather, just bad preparation,” said Jake Bleacher, chief scientist for NASA’s Human Exploration and Operations Mission Directorate at the agency’s Headquarters. “Space weather is what it is – our job is to prepare.” Understanding the cycles of the Sun and is one part of that preparation.

To determine the start of a new solar cycle, the prediction panel consulted monthly data on sunspots from the [World Data Center for the Sunspot Index and](#)

WCARC Weekly Net

Tuesdays at 2100 all year
147.18 MHz 67 Hz PL

Net Control Roster

Oct 6	WB8NQW
Oct 13	N1RB
Oct 20	KG8FH
Oct 27	KD8VWU
Nov 3	KD8NJW
Nov 10	WB8NQW

NEXT MEETING

Business Meeting

Monday October 12

NOTE CHANGE!!

TIME: 7:30 PM/7:00 EB

PLACE:

**Woodland Mall Food Ct.
1234 N. Main St.
Bowling Green, OH**

10 meter Net

***informal group
meets***

Sunday

@ 20:30

on 28.335 MHz

Fusion Net

Thursday

@ 19:30

on 442.125 MHz

67 Hz PL on FM

Informal net

Net Check Ins

Sep 22—continued

KD8NJW
W8PSK
WD8LEI
KA8VNG
KD8RNO
WE8TOM
WD8JWJ
KC8NKC (15)

Sep 29 Traffic: 0

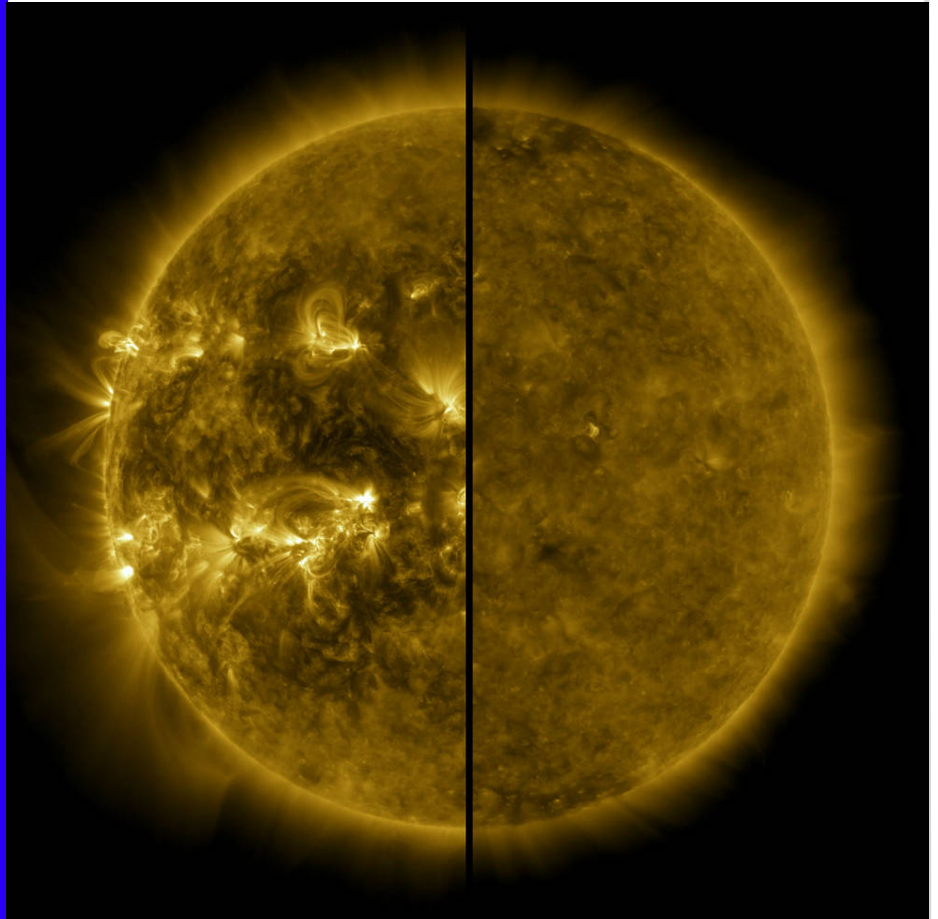
(NCS)
N1RB
W8PSK
KE8CVA
KG8FH
KD8GBZ
KE8PJM
WD8JWJ
WB8NQW
WE8TOM
KD8RNO (10)

Oct 6 Traffic: 0

(NCS)
WB8NQW
NM8W
KE8CVA
KE8PJM
K8DLF
KC8EKT
KG8FH
WD8LEI
KD8RNO
KD8NJW
W8PSK
WD8JWJ
N1RB
KE8OWM
WE8TOM
KC8NKC (17)

Sunspot—from p. 4

[Long-term Solar Observations](#), located at the Royal Observatory of Belgium in Brussels, which tracks sunspots and pinpoints the solar cycle's highs and lows.



This split image shows the difference between an active Sun during solar maximum (on the left, captured in April 2014) and a quiet Sun during solar minimum (on the right, captured in December 2019)

“We keep a detailed record of the few tiny sunspots that mark the onset and rise of the new cycle,” said Frédéric Clette, the center’s director and one of the prediction panelists. “These are the diminutive heralds of future giant solar fireworks. It is only by tracking the general trend over many months that we can determine the tipping point between two cycles.”

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

October Contests-cont

Oct 18-19 Illinois QSO Party	1700 to 0100 Z	160m to 10 m all modes
Oct 19-23 ARRL School Club Roundup	1300 to 2359 Z	160 m to 10 m CW/SSB
Oct 24-25 CQ WW DX 'test	0000 to 2359 Z	160 m to 10 m SSB
Oct 31-Nov 1 UK/EI DX 'test	1200 to 1200 Z	80 m to 10 m SSB

October Hamfests

Notice — all local area (OH, MI, IN) hamfests for October have been cancelled— Patrons are advised to check sponsoring organization web sites for up-to-date information.

Foxhunt Held

A foxhunt was held on Saturday, September 5, immediately after the Club Breakfast meeting. The wily fox was Yours Truly, N1RB, assisted by my able sidekick, N1LB. The first foxhound to find the lair at the Weston recycling center was WB8NQW-Bob, followed by the team of W8PSK-Phil and KE8CVA-Terry. Both teams utilized one of the new heterodyne attenuators by [KC9ON](#) that allow pinpoint location of the fox when strong signals at close-in distances overwhelm the front ends of most HTs. Both of the hounds had recently activated their attenuators and this event gave them an opportunity to successfully test them out. ■



Rear: W8PSK, WB8NQW, N1RB
Front: KE8CVA
Photo courtesy of N1LB/KE8CVA

Sunspot—*from p. 6*

With solar minimum behind us, scientists expect the Sun's activity to ramp up toward the next predicted maximum in July, 2025. Doug Biesecker, panel co-chair and solar physicist at NOAA's Space Weather Prediction Center ([SWPC](#)) in Boulder, Colorado, said Solar Cycle 25 is anticipated to be as strong as the last solar cycle, which was a below-average cycle, but not without risk.

"Just because it's a below-average solar cycle, doesn't mean there is no risk of extreme space weather," Biesecker said. "The Sun's impact on our daily lives is real and is there. SWPC is staffed 24/7, 365 days a year because the Sun is always capable of giving us something to forecast."

Elsayed Talaat, director of Office of Projects, Planning, and Analysis for NOAA's Satellite and Information Service in Silver Spring, Maryland, described the nation's recent progress on the Space Weather Action Plan as well as on upcoming developments, including NOAA's [Space Weather Follow-On L-1](#) observatory, which launches in 2024, before Solar Cycle 25's predicted peak.

"Just as NOAA's National Weather Service makes us a weather-ready nation, what we're driving for is to be a space weather-ready nation," Talaat said. "This is an effort encompassing 24 agencies across the government, and it has transformed space weather from a research perspective to operational knowledge." ■

ISS—*from p. 1*

Space Station! Here is the access information:

- Mode: FM Voice
- Uplink Frequency: 145.990 MHz, PL 67.0 Hz
- Downlink Frequency: 437.800 MHz



IORs Hardware and Kenwood Radio

The repeater uses the new InterOperable Radio System (IORS), a space-modified JVC Kenwood D710GA transceiver, and an ARISS developed power supply system. Here's some more information from the ARISS Press Release: The initial operation of the new radio system is in FM cross-band repeater mode using an uplink frequency of 145.99 MHz with an access tone of 67 Hz and a downlink frequency of 437.800 MHz. System activation was first observed at 01:02 UTC on September 2. Special operations will continue to be announced.

The rig consists of a special, space-modified JVC Kenwood D710GA transceiver, an ARISS developed multi-voltage power supply, and interconnecting cables. You can [view the full ARISS Press Release](#) here. ■

***Back in the Old Days....
Installing the Antennas on ADM BLDG roof***

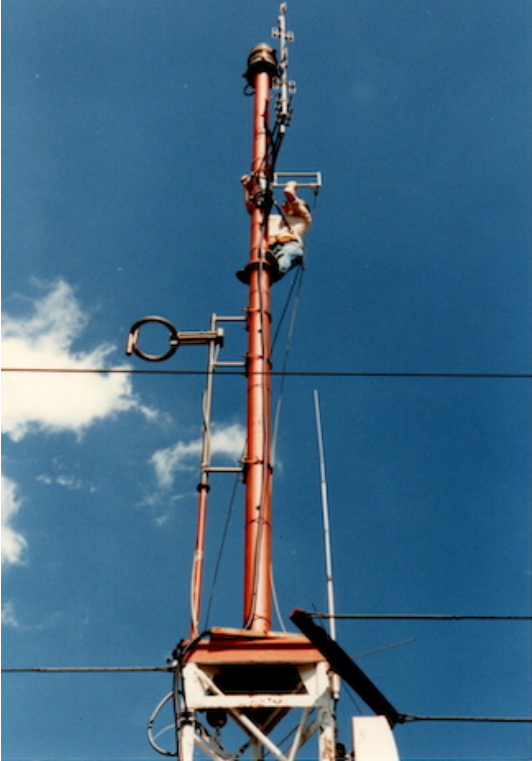
Photos courtesy of WD8ICP



Helicopter prepares to lift tower



Tower is put in place



Climbing the Tower



Installing WCARC repeater antennas—guess who?

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

