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WOOD COUNTY AMATEUR RADIO CLUB

HAJDDE

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Solar Activity May Peak 1 Year Earlier than Predicted

from <u>space.com</u>

The Sun may reach the peak of its current activity cycle in 2024, one year ahead of official predictions, new research suggests. But even after the sun reaches its peak, its wrath will continue to threaten Earth for at least the next five years.

A team of researchers who had previously released an <u>alternative solar</u> <u>cycle prediction</u> that turned out to be more accurate than official forecasts by NASA and the National Oceanic and Atmospheric Administration (NOAA) recently published improved estimates of the current <u>solar cycle</u>'s strength and progress.

The team's finalized forecast for the current cycle expects it to peak in late 2024, one year earlier than NASA and NOAA had predicted. The cycle, the team thinks, will reach about 185 monthly sunspots during its maximum and thus be somewhat milder than what the team originally forecasted. This peak intensity



Sunspots at high solar activity (NASA)

continued on p. 7

Net Check Ins-I

Int

lul	4	Traffic: 0
	N1RB KE8CVA/P KG8FH KC8EKT KE8PJM KD8NJW WB8NQW KD8RNO WE8TOM	(NCS) (9)
lul	11	Traffic: 0
	KG8FH WE8TOM KE8CVA KC8EKT KD8NJW WB8NOW	(NCS)

KE8WTG

N1RB

K8LL

WD8LEI

(13)

N8VNT KD8RNO **KB8QEW**

Brain Teasers

- 1. What is the voltage across a 5 ohm resistor if a current of 200 mA flows through it?
 - a.) 1 V
 - **b.)** 100 mV
 - **c.)** 10 V
 - d.) 10 mV
- 2. What electrical component is usually constructed as a coil of wire ?
 - a.) switch
 - **b.)** capacitor
 - c.) diode

0

d.) inductor

3. What is the function of component #2 below?

- a.) give off light when current flows through it
- **b.)** supply electrical energy
- c.) control the flow of current
- d.) convert electrical energy into radio waves



August Contests

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

Aug 5-6	1800 to 0559 Z	160 m to 10 m
North American QSO Party-CW		CW
Aug 12-13	0000 to 2359 Z	80 m to 10 m
WAE DX 'test-CW		CW
Aug 12-13	1400 to 0400 Z	160 m to 10 m
Maryland-DC QSO Party		all modes
Aug 19-20	1200 to 1200 Z	160 m to 10 m
Keyman's Club of Japan 'test		CW
Aug 19-20	1800 to 0559 Z	160 m to 10 m
North American QSO Party-SSB		SSB
Aug 26-28	0400 to 0400 Z	160 m to 10 m
Hawaii QSO Party		all modes
Aug 26-27	1200 to 0300 Z	160 m to 10 m
W/VE Islands QSO Party		all modes
Aug 26-27	1400 to 2000 Z	80 m to 10 m
Kansas QSO Party		all modes
Aug 26-27	1600 to 0400 Z	160 m to 2 m
Ohio QSO Party		all modes
Aug 26-27	1200 to 1200 Z	80 m to 10 m
YO (Romania) DX HF 'test		CW/SSB

Net Check Ins-II

Jul	18	Traffic: 0
	KD8NJW KE8CVA KG8FH WD8LEI WB8NQW KE8WTG KD8RNO WE8TOM	(NCS)
	WD8ICP	(9)
Jul	25	Traffic: 0
	WB8NQW WE8TOM N1RB KD8RNO KE8CVA/F KG8FH K8DLF KE8WTG KC8EKT WD8LEI N8VNT KD8DWO/	(NCS)

Slow-Scan TV Experiment with ARRL Planned for ARISS

from ARRL Letter

Amateur Radio on the International Space Station (ARISS), in collaboration with <u>ARRL</u>, plans to carry out a special slow-scan TV (SSTV) experiment from the ISS on Wednesday, July 26, 2023. During the event, the Columbus Module Repeater, transmitting at 437.800 MHz, will carry a message to be received by teachers attending the <u>ARRL Teachers Institute on</u> <u>Wireless Technology</u> professional development class. The pass will be over the Mid-Atlantic and New England area, with transmissions scheduled to begin at 20:05 UTC (16:05 ET) and end at 20:20 UTC (16:20 ET). If necessary, a backup window is scheduled from 21:40 UTC (17:40 ET) to 21:55 UTC (17:55 ET).

Radio enthusiasts are welcome to download the message and follow along with the event, but it is asked that all hams refrain from using the repeater for voice contacts during the event. This is a special experiment conducted through ARISS and ARRL. After the experiment has concluded, normal operations of the repeater should resume in voice mode only.

The ARRL Teachers Institute on Wireless Technology is a donor-funded professional development program designed to help classroom teachers elevate their STEM programs through the use of wireless technology. As a part of the ARRL **Education & Technology Program**, several sessions are conducted each year, and the program continues to grow.

The primary goal of the ARISS program is to promote exploration of science, technology, engineering, the arts, and mathematics topics (STEM/

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

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WCARC Weekly Net	
Tuesdays at 2100 all year	

147.18 MHz 67 Hz PL **Net Control Roster** N1RB Aug 1 Aug 8 KG8FH Aug 15 **KD8NJW** Aug WB8NQW 22 Aug 29 N1RB Sep 5 KG8FH

NEXT MEETING

Business Meeting

Monday August 14 TIME: 7:30 PM/7:00 EB PLACE: Sheriff's Training Room E. Gypsy Lane Rd. & S. Dunbridge Rd.. Bowling Green, OH

10 meter Nets

Informal SSB group meets Sunday@ 20:30 local on 28.335 MHz

Informal CW group meets Tuesday @ 20:00 local on 28.050 MHz Fusion Net Thursday @ 19:30 local

on 442.125 MHz

Wires-X Operators welcome Informal net

Ohio QSO Party Coming up on Aug 26-27

The annual Ohio QSO Party will be held from 1600 Z on August 26 to 0400Z on August 27. The objective of the contest is for amateurs inside the state of Ohio to make contact with as many amateurs as possible, both inside and outside of Ohio, and for amateurs outside the state of Ohio to make contact with as many Ohio stations as possible. Non-Ohio stations may work only Ohio stations for credit, while Ohio stations may contact anyone. All stations may work the entire twelve hours. Exchange is the County for inside Ohio, and State for outside Ohio.

Operation will take place with CW and SSB modes on 160, 80, 40, 20, 15, and 10 meters. To count for credit, stations may be worked once per mode on each band; i.e. K8MAD may be worked on both 40 CW and 40 SSB for point credit. Each station may be contacted 12 times (once per each of the 6 bands and once per mode on each band). Suggested activity frequencies will center around:

CW: 1.815, 3.545, 7.045, 14.045, 21.045 and 28.045 MHz **SSB:** 1.850, 3.825, 7.200, 14.250, 21.300, and 28.450 MHz

The entry categories are: single op, multiple op, EOC (Emergency Ops Center), Mobile and Rover. Power

categories are: QRP (\leq 5 W), Low Power (> 5 W but \leq 100W), and High Power (> 100W).

If you are new to contesting, breaking in by working a QSO Party is the way to go. The "contesting" is rather easy-going, and sometimes you can even move over to chewing the rag. Also, once it is known that you are from Wood County, you might attract a pile-up. Give it a try—it's always a lot of fun. For more details, go to: ohqp.org.

slow-scan from p. 4

STEAM). ARISS does this by organizing scheduled contacts via amateur radio between crew members aboard the ISS and students. The last scheduled ARISS contact was with scouts at Camp William B. Snyder in Prince William County, Virginia. It occurred on Friday, July 21, 2023 at 1754 UTC (13:54 EDT). Scouts contacted Astronaut Sultan AI Neyadi, amateur radio call sign KI5VTV, who uses the ARISS radio station on the ISS to talk. The downlink frequency for this contact is 145.800 MHz and may be heard by listeners within the ISS footprint.

ARISS is a cooperative venture of international amateur radio societies and the space agencies that support the ISS. In the US, participating organizations include NASA's Space Communications and Navigation program (SCaN), the ISS National Laboratory -- Space Station Explorers, <u>ARRL</u>, and <u>AMSAT</u>.

minutes from p. 1

will place this cycle at about the average compared to the historical record.

Below is an up-to-date plot of both sunspot number (SSN) and 10.7 cm solar flux as of June, 2023.



recent solar activity ref: solarham.com

In both plots, the predicted values for both SSN and flux are shaded in gray. It is safe to say that the data so far have exceeded the predictions, with numbers that are about twice as high. This is a result of the fact that Solar Physics is still a rather inexact science, and predictions can be as much as 50 per-cent off either way.

Of course, the data do fluctuate, but after smoothing, it is apparent that they seem to be pointing to a much higher maximum than predicted—probably occurring in late 2024 or early 2025.

This eventuality is a wake-up call for all HF operators who may be interested in DX—propagation on the higher bands (20m, 15m, 10m, and even 6m) will go

long for longer periods of time. Many of these bands will stay open for long distance DX throughout the night, only to return to short skip in the middle of the day when absorption from the D layer dominates propagation.

This is prime time for those who are interested to work on completing the contacts necessary for awards such as: WAS, DXCC and WAZ.

As yet there are no predictions being made about how Cycle 26 will turn out (they are usually not made until the intercycle minimum occurs), but to quote an old saw, "strike while the iron is hot", and get as much operating time in as you can over the next couple of years during the peak time of Cycle 25.

FOR SALE:

MFJ-998 Legal Limit Autotuner

<u>NEVER</u> Used (Hooked up once)

Asking: \$500.00

Contact KG8FH at: jhalsey@woh.rr.com

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

