

# CO CHATTER

FEBRUARY 2019

VOLUME B18 • ISSUE 12

## WOOD COUNTY AMATEUR RADIO CLUB

President	WB8NQW	Bob Willman
Vice President	KD8VWU	Doug Perez
Secretary	N7RB	Bob Boughton
Treasurer	KD8NJW	Jim Barnhouse
Board Member	KE8CVA	Terry Halliwill

<http://wcarc.bgsu.edu>

### ***2019 Kick-off Brunch Held***

The kick-off get together for 2019 was held on Sunday, January 13, at the Holiday Inn French Quarter in Perrysburg.

Road conditions were not the best, as snow had fallen overnight. However, this did not prevent about 18 members and friends of WCARC from attending the popular annual event. The food served up by the J. Patrick's brunch buffet was excellent as usual, and several groups were observed to be enjoying both the meal and the conversation.

Many of the discussions were apparently sufficiently interesting so as to carry on past the closing time of the restaurant and had to be ended by the clean-up staff.

All in all, a good time was had by all who took this opportunity to meet in person the hams that they hear on the air. With the announcement that the French Quarter will be closing in March, the Club is in the market to identify a new location

for the 2020 kick-off. This issue will be discussed in subsequent business meetings and suggestions are welcome, so please stay tuned. ■

### **What will the Sun do next?**

*from EarthSky*

It is thought that the current sunspot cycle – cycle 24 – will approximately span the years 2008 to 2019. In other words, we haven't reached the lowest ebb of the cycle yet, and no one knows exactly when it will come, but solar physicists think we're probably close. This cycle has been an odd one, with fewer sunspots visible on the sun's surface than expected. Now, with the next cycle due to start, we're beginning to see projections for what will happen when the sun revs up again and begins producing more sunspots. Will the next sunspot cycle be more "normal" or will we again see a decreased number of spots?

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## Net Check Ins

**Jan 8**      **Traffic: 0**

**N1RB (NCS)**

**KE8CVA**

**K8BBK**

**KC8EKT**

**KG8FH**

**WB8NQW**

**KD8NJW**

**N8VNT**

**KA8VNG (9)**

**Jan 15**      **Traffic: 0**

**WB8NQW (NCS)**

**KC8EKT**

**KG8FH**

**KD8RNO**

**WD8LEI/M**

**KD8NJW**

**N1RB**

**KE8CVA**

**WD8ICP (9)**

## Brain Teasers

1. If your license has expired and is still within the allowable grace period, may you continue to operate a transmitter on Amateur frequencies?
  - a.) no, transmitting is not allowed until the FCC database shows that the license has been renewed
  - b.) yes, but only if you identify with the suffix GP
  - c.) yes, but only during authorized nets
  - d.) yes, for up to two years
2. What should be done when using voice modes to ensure that messages containing unusual words are received correctly?
  - a.) spell the words by voice and Morse code
  - b.) speak very loudly into the microphone
  - c.) spell the words using a standard phonetic alphabet
  - d.) all these choices are correct
3. In what type of circuit is current the same through all components?
  - a.) series
  - b.) parallel
  - c.) resonant
  - d.) branch

# February Contests

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

<b>Feb 2-3</b>	<i>0000 to 2359 Z</i>	160 m on up
<b>Vermont QSO Party</b>		<b>all modes</b>
<b>Feb 2-3</b>	<i>0001 to 2359 Z</i>	10 m
<b>10-10 Int'l Winter 'test</b>		<b>phone</b>
<b>Feb 2</b>	<i>1400 to 2359 Z</i>	160 m to 10 m
<b>Minnesota QSO Party</b>		<b>all modes</b>
<b>Feb 2-3</b>	<i>1600 to 2359 Z</i>	160 m to 10 m
<b>British Columbia QSO Party</b>		<b>all modes</b>
<b>Feb 9-10</b>	<i>1200 to 1200 Z</i>	160 m to 10 m
<b>PACC (Netherlands) DX 'test</b>		<b>CW/SSB</b>
<b>Feb 9-11</b>	<i>1400 to 0200 Z</i>	160 m to 10 m
<b>YLRL YL-OM 'test</b>		<b>all modes</b>
<b>Feb 16-17</b>	<i>0000 to 2359 Z</i>	160 m to 10 m
<b>ARRL Int'l DX 'test</b>		<b>CW</b>
<b>Feb 23-24</b>	<i>0600 to 1800 Z</i>	80 m to 10 m
<b>REF (France) DX 'test</b>		<b>SSB</b>
<b>Feb 23-24</b>	<i>1300 to 1300 Z</i>	80 m to 10 m
<b>UBA (Belgium) DX 'test</b>		<b>CW</b>
<b>Feb 23-24</b>	<i>1500 to 0159 Z</i>	160 m to 10 m
<b>South Carolina QSO Party</b>		<b>all modes</b>
<b>Feb 23-24</b>	<i>1800 to 0059 Z</i>	80 m to 10 m
<b>North American QSO Party</b>		<b>RTTY</b>
<b>Feb 24-25</b>	<i>1500 to 0059 Z</i>	80 m to 10 m
<b>North Carolina QSO Party</b>		<b>all modes</b>

# History of the Ham Radio Callsign III

by [Mike Ritz \(W7VO\)](#)

The Pre-War Years, 1927-1941

“Amateur Radio is Here to Stay!”

The Washington Conference / Radio Act of 1927 established formalized US amateur radio bands, and finally put US amateurs under international prefix rules that were loosely established in the international conference of 1913. As a result of this act a new commission was formed, the Federal Radio Commission. The commission was assigned the task of issuing licenses, including amateur radio. Also part of this latest act, the US was finally going to follow the already established International Telegraph Union (ITU) call sign standards.

The ITU standards were upgraded to grant the entire “K” prefix to the US, in addition to the existing “W” and “N” prefixes. (Remember that Germany had the “KAA” to “KCZ” prefixes issued previously). The Navy had reserved the “N” prefix, while starting in 1928 the “W” and “K” prefixes were authorized for civilian services, such as amateur radio. As new amateur licenses were issued, and old ones were renewed, the “W” prefix was simply added to the existing call sign. For example, the call sign of **6UO**, (or the unofficial **nu6UO**), became **W6UO**. The “K” prefix at that time was reserved for US possessions, such as Alaska, Hawaii, and other islands. (Note that “A” block letters were unassigned until 1947, when the US received the “AA” through “AL” prefix blocks). The US amateur ra-

dio call sign had finally taken its modern shape we all know today.

Unrelated to amateur history, (but a question that always seem to arise), is the history of how the US commercial broadcast stations got geographically divided into “K” (for stations West of the Mississippi), and “W” for Eastern stations. This oddity goes back to early Federal Radio Commission regulations, and was originally applied to ships operating either in the Atlantic, (“K” prefixes), or Pacific or Great Lakes area (“W” prefix). Eventually, this was applied to land based commercial stations as well, (but somehow in reverse order), using (with exceptions), a rough line matching the course of the Mississippi river.

In 1933, President Franklin Roosevelt requested the Secretary of Commerce to appoint an interdepartmental committee for studying electronic communications. A recommendation was made by the committee for the establishment of a new agency that would regulate *all* interstate and foreign communication by both wire and radio, plus telegraphy, telephone and broadcast, under one umbrella. This resulted in what became known as the Communications Act of 1934. A key part of this act was the creation of a new federal organization known as the Federal Communications Commission, (FCC) to replace the Federal Radio Commission that was previously established in 1927. Amateur licenses were now moved under this new commission, and this act also created many of the laws that still govern the hobby to this day.

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## **WCARC Weekly Net**

**Tuesdays at 2100 all year**

**147.18 MHz 67 Hz PL**

**Net Control Roster**

**Feb 5                   WB8NQW**

**Feb 12                   N1RB**

**Feb 19                   KD8VWU**

**Feb 26                   KD8NJW**

**Mar 5                    K8OVO**

**Mar 12                   WB8NQW**

## **NEXT MEETING**

### ***Business Meeting***

**Monday**

**February 11**

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

**PLACE:**

**Sheriff's Training Room**

**Dunbridge Rd. and**

**Gypsy Lane Rd.**

**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***

***discussion of all***

***things digital***

## Net Check Ins— continued

Jan 22 Traffic: 0

KD8NJW (NCS)  
K8BBK  
KE8CVA  
KC8EKT  
KG8FH  
KD8AVT  
K8JU  
WB8NQW  
N8VNT  
KD8RNO  
KD8VWU  
N1RB  
WD8LEI  
KA8VNG (14)

Jan 29 Traffic: 0

WB8NQW (NCS)  
NM8W  
K8BBK  
KE8CVA  
KC8EKT  
KG8FH  
KE8CUZ  
WD8JWJ  
N1RB  
N8VNT  
WD8LEI  
KD8RNO (12)

calls—from p. 4

On December 7, 1941, the “day that will live in infamy”, the world of amateur radio was upended for the second time, as the US was drawn into the Second World War. All amateur activity was officially suspended January 9, 1942, for the remainder of the war. The big difference here though, was that the FCC continued to issue and was allowed to renew amateur radio *operator* licenses. After all, that gave the government a ready pool of trained and *certified* radio operators and technicians for the war effort. There were no *station* licenses issued, and existing ones were considered revoked. Once again hams were forced to silence their stations but at least this time, unlike the previous war, receivers were still allowed to be used.

This lasted until the war officially ended in September, 1945, and shortly afterwards amateurs were granted limited permission to get back on the air in November of 1945, with only the ten and two meter bands to start. The US amateurs were back, even if only in a limited capacity at the time. ■

sun—from p. 1

On December 6, 2018, the Center of Excellence in Space Sciences India ([CESSI](#)) reported that two of its scientists have made a prediction for the upcoming sunspot cycle. Solar physicist [Dibyendu Nandi](#) and his Ph.D. student Prantika Bhowmik devised a new prediction technique, which simulates conditions both in the sun’s *interior*, where sunspots are created, and on the solar *surface*, where sunspots are destroyed.

Earlier predictions ([like this one](#)) have suggested the coming sunspot cycle 25 will be weaker than the current cycle 24. But, based on their model, Nandi and Bhowmik believe cycle 25 might be similar to or even stronger than 24. They expect the next cycle to start rising about a year from now and to peak in 2024.

Their work was [published](#) December 6, 2018, in the peer-reviewed journal *Nature Communications*. Why should we care? Indeed, many people do care about

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# February Hamfests

**Feb 17 Livonia ARC Hamfest.** Civic Park Senior Center, Livonia, MI. web: <http://www.livoniaarc.com/index.php?page=swapshop>

**Feb 17 InterCity ARC Hamfest.** Richland County Fairgrounds, Mansfield, OH. web: <http://www.iarc.club>

**Mar 3 Northern Ohio ARS Hamfest.** Lorain County Community College, Elyria, OH. web: <http://www.noars.net/hamfests/noarsfest>

## Time to Renew

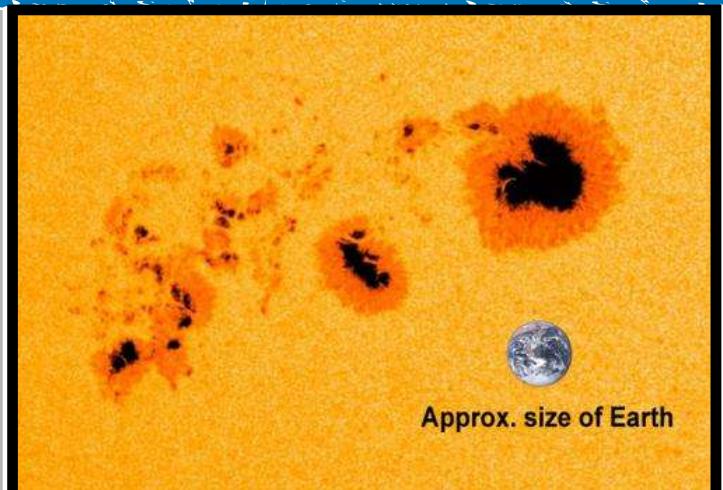
**WCARC 2018 membership dues are payable to:  
WCARC Treasurer, P. O. Box 534, Bowling Green, OH**

*sun—from p. 6*

solar activity, due to the [sun-Earth connection](#). High activity on the sun can negatively affect some earthly technologies, for example, [electric grids and orbiting satellites](#). So – as Nandi and Bhowmik point out – an accurate prediction of a coming solar cycle might help space scientists plan satellite launches and estimate satellite mission lifetimes.

Another sun-Earth issue has particularly grabbed the public's imagination: a little-understood, possible link between activity on the Sun and Earth's climate.

*Below is one of the largest sunspots in the last 9 years, labeled AR1944, seen in early January 2014, near the peak of the current sunspot cycle 24. An image of Earth has been added for scale. Image via NASA/SDO/Phys.org.*



A [statement](#) from CESSI explained the climate question:

The current sunspot cycle, dubbed as solar cycle 24, is just ending, and it has been one of the weakest cycles in a century. In fact, over the last several decades, successive sunspot cycles have significantly weakened in strength, and some earlier studies based on sim-

*continued---on p. 8*

**sun—from p. 7**

plistic statistical approaches have claimed a significant weakening of the sun’s activity is imminent, resulting in a loss of sunspot cycles.

The last such episode, known as the [Maunder minimum](#), occurred between 1645 and 1715, and coincided with the [Little Ice Age](#), a period of long winters and global cooling.

Was there a causative link between reduced sunspot numbers and the Little Ice Age? In other words, did weakened activity on the sun *cause* the Little Ice Age? If so, could a series of weak solar cycles cause another global cooling in the years ahead? If that happened, the cooling would be laid on top of the ongoing trend of global warming, which virtually all climate scientists agree is caused by human activities.

For scientists, there are two big problems with the idea of a sun-caused cooling (or a sun-caused warming, for that matter). First, *no known physical mechanism* has yet been found, explaining exactly how a change in solar activity affects Earth’s climate.

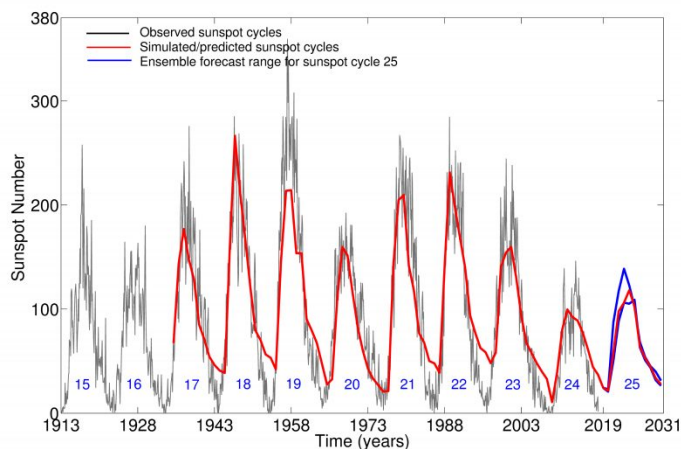
Second, scientists are aware of *only one episode* of decreased sunspots during a time of global cooling. The coincidence of the Maunder Minimum and Little Ice Age is suggestive, yes. But, for scientists, it doesn’t *prove* anything.

Still, the coincidence exists, and the idea is intriguing. And so it’s tempting to ask if a significantly weak sunspot cycle 25 – in the coming decade – would *temporarily alleviate* ongoing global warming.

Scientists have, in fact, been asking this question.

According to Bhowmik and Nandi, all that sort of speculation may be moot. The sun might come roaring back into something like more “normal” activity in the decade ahead; it might begin producing many more sunspots. Please note that “normal” is in quotes because no one knows what “normal” really is, for the sun. Bhowmik and Nandi sounded confident when they said:

“[We] find no evidence of an impending disappearance of sunspot cycles and thus conclude that speculations of an imminent sun-induced cooling of global climate is very unlikely.” Are they right? Will their model prove to be predictive for solar cycle 25? Time will tell.



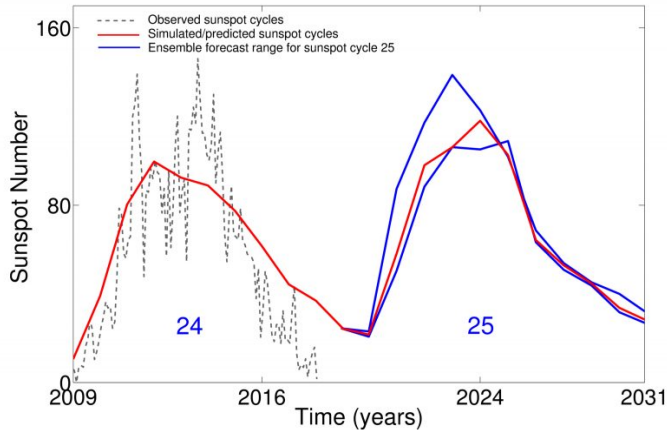
**Above: Successful reproduction of a century of sunspot observations with their model. The red curve represents the simulated (starting from the beginning of solar cycle 17) and predicted (cycle 25) solar activity. Image via CESSI.**

**Below: Prediction for sunspot cycle 25 compared with the current sunspot cycle 24. The work suggests the coming sunspot cycle will be similar to, or slightly stronger than the activity levels that are just ending (image via CESSI).**

**continued---on p. 9**



## **sun—from p. 8**



Bottom line: Solar cycle 24 was weak, with fewer sunspots at its peak than expected. Many have predicted an even weaker solar cycle 25 for the coming decade. But two scientists from India have a new predictive model, based on computer simulations, suggesting otherwise. ■

## ***A Weekend of Ionospheric Inquiry***

*from ARNewsline*

Two months before the big Hamvention gathering in Dayton, Ohio, a different assembly of amateurs is taking place in Ohio -- this time in Cleveland. It's called the HamSCI 2019 Workshop Set and it's giving space weather and the ionosphere center stage. The program will take place on the 22nd and 23rd of March on the campus of Case Western Reserve University. HAMSCI's founder Nathaniel Frissell, W2NAF, and the university's amateur radio club W8EDU, are asking for presenters to submit papers for the conference, which will explore such subjects as traveling ionospheric disturbances, sporadic E, geomagnetic storms and the use of ham radio techniques to

study many of these phenomena. Presentations are already scheduled by ham radio author Ward Silver, N0AX, and propagation specialist Carl Leutzelschwab, K9LA. Amateurs who would like to join the lineup of those giving talks should send their abstracts no later than February 1st to hamsci at [hamsci@hamsci.org](mailto:hamsci@hamsci.org) ■

## **Recipe Corner**

*editor's note— If you have any favorites that you would like to share, drop me a line at: [boughton@bgsu.edu](mailto:boughton@bgsu.edu).*

### **Spaetzli (Swiss dumplings)**

1lb flour  
2 eggs  
3/4 pt mixed milk and water  
1 tsp salt

Warm the milk and water and stir in flour until smooth. Beat in eggs, until bubbles form. Have a large saucepan of boiling salted water at the ready. Drop the batter in small portions (1tsp or so) from the point of a spoon into the boiling water. Do not attempt to cook too many at one time. As the spaetzli rise to the top of the water, they are finished cooking and should be lifted from the water with a perforated spoon at once and placed on a hot plate.

They can be served at once with hot butter and grated Emmentaler cheese on top, or covered with fried onions and served as a main dish. Can also be served instead of potatoes as a side dish. Other variations include adding finely chopped drained spinach to the batter, or to add finely minced liver to the batter before dropping into the boiling water. ■

# Livonia Amateur Radio Club

Talk-in  
145.35 with 100 PL  
or 146.52 Simplex

49th

GREAT  
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ANNUAL

# SWAP-N-SHOP

Buy and Sell Amateur Radio  
Gear, Computers, or  
Electronic Test Equipment



Civic Park Senior Center  
15218 Farmington Rd.  
Livonia, MI

(SE corner of Farmington  
Rd. and 5 Mile Rd.)

Livonia ARC  
P.O. Box 51532  
Livonia, MI 48151-0532  
[www.livoniaarc.com](http://www.livoniaarc.com)

Call (734) 941-5043

or e-mail us at [k8uns@arrl.net](mailto:k8uns@arrl.net)

Sunday, February 17, 2019 8:00am - 12:00pm



\*Lots of Tables  
(8' tables for \$16 each  
if paid in advance or  
\$20.00 if available and  
paid at the door)

\*Door Prizes

\*Food Concession

\*Tickets \$5.00

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

