## **Northwest Indiana DX CLUB**

Volume 8, Issue 12

December 2020

#### **President's Corner**

## Hello everyone,

The Sun is working overtime for us. Sunspots are up higher than we have seen in a few years.

Work some DX!

Please be safe and stay well.

73 John W3ML Good DXing!

#### INSIDE THIS ISSUE

- 1 President Speaks
- 2- Member News/DX News

## "Working the World from the Black Hole"

#### **NWI DX Club Website**

http://nwidxclub.weebly.com/



Don't forget Steve is our new QSL Card Checker.

DXCC Card Checking is available by appointment and may be available at meetings. E-Mail <a href="mailto:kd9hl@arrl.net">kd9hl@arrl.net</a> for an appointment or to make other arrangements.

#### Reminder, the NWIDX Club has a club call W9NWI.

The call is available to members for use during contests, special events, Field Day, etc. To schedule dates for its use, contact the trustee, Steve Mollman – KD9HL. kd9hl@arrl.net

QSL cards are available.

## **Notice:**

Articles in the Northwest Indiana DX Club Newsletter (except for those separately copyrighted) may be reprinted, provided proper credit is given.

"Working the World from the Black Hole"

## Member DXCC Scorecard

### A Reminder

We will be listing the membership's ARRL DXCC standings in the January issue of the newsletter. If you have worked any new entities since the last listing and haven't yet submitted them to the ARRL please do so before December 24, 2020. **QSL Cards**-Steve Mollman, KD9HL is our Official ARRL DXCC Card Checker. Contact Steve for card checking. You may email him at KD9HL@arrl.net for details on how to mail your cards to him, if you desire to go that route.

**Logbook of the World-**To submit LOTW credits on-line, click the **Award** tab, and in the Your **LoTW** ARRL **DXCC** Accounts section on the left side of the Logbook **Awards** page, select the **DXCC Award** Account for which you intend to **submit** an application. Select the **Award Account Menu** on the left side and then select **Application**.

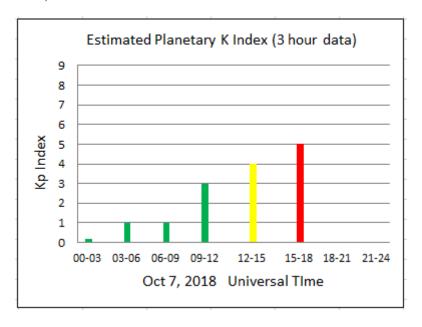


## MERRY CHRISTMAS & HAPPY NEW YEAR!

## Pop Quiz

Carl Luetzelschwab K9LA July 2020

Suppose you're monitoring the K indices (at <a href="https://www.swpc.noaa.gov/">https://www.swpc.noaa.gov/</a> in the lower right panel, for example) and you see the following progression on a given day for the first six values of the Kp index (Kp is the 3-hour planetary K index – a compilation of many observatories to see a worldwide view of the activity of the Earth's magnetic field).



#### What should you do?

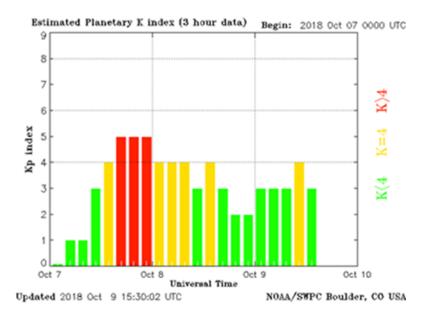
- A) Turn off your radio as the F2 region is going to be depleted of electrons and there won't be any propagation.
- B) Check the higher HF bands for enhanced propagation.

If you chose A, you might miss out on a golden opportunity to enjoy some unusual propagation. If you chose B, you probably realize that there can be a short-term enhancement in F2 region propagation on low and mid latitude paths when the K index initially spikes up.

The B scenario is what happened for the 2018 running of the California QSO Party (October 6 and 7). On Saturday the 6<sup>th</sup>, no W6 stations were heard on 10-meters here in the Midwest. That isn't unusual as the MUF (maximum usable frequency) for this path at solar minimum during the daytime would only be about 20 MHz.

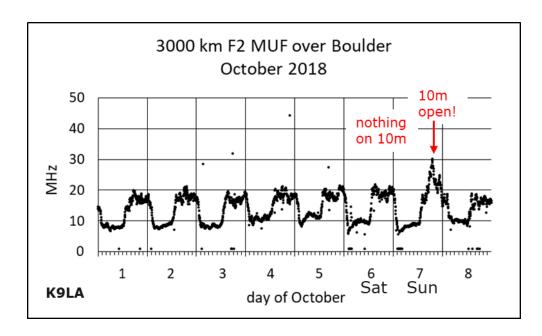
But on Sunday the 7<sup>th</sup>, the path from the Midwest to W6 on 10-meters opened. What happened was an enhancement in the F2 region electron density due to the Kp index spiking up in the 12-15z period on October 7. This is the positive phase of a geomagnetic storm.

Here's the Kp index for October 7, 8 and 9 of 2018. It's a more complete picture of the previous Kp index plot.



You can see the Kp index spiking up to 4 in the 12-15z period on the 7th, and to 5 in the 15-18z, 18-21z and 21-24z periods on the 7<sup>th</sup> before settling down a bit.

And we're in luck – the Boulder ionosonde is along the Midwest to W6 path and is about at the midpoint. Here's the Boulder 3000 km MUF data for the first 8 days in October 2018. This is the MUF for a 3000 km path with Boulder as the midpoint.

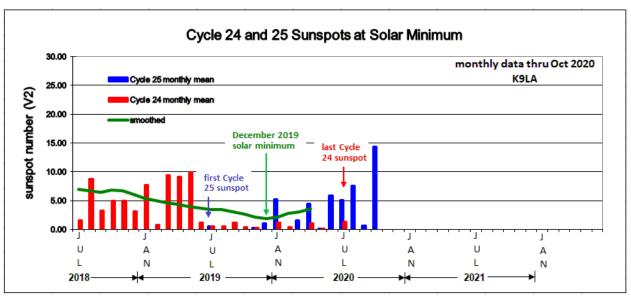


For the first 6 days of October 2018, the maximum MUF during the daytime was indeed around 20 MHz. But after the Kp index spiked up on the 7<sup>th</sup>, the MUF increased to a bit over 30 MHz for a short time. Thus 10-meters opened up and there were many QSOs to be had if you were on 10-meters at the right time.

So the next time the Kp index spikes up, don't immediately turn off your radio. Check the higher HF bands to see if there is an F2 region enhancement. It doesn't happen all the time, but it's worth a quick check.

# SUNSPOT CYCLE 25 EMERGING <u>by</u> <u>K9LA/W9KTP</u>

I happened to spot a recent graph on Carl Luetzelschwab's (K9LA) website that should excite all DXers. Sunspot 25 is here and climbing. Yippee!



Carl made the following points.

"The solar cycles overlap. Sunspots from Cycle 24 and Cycle 25 occurred simultaneously for about a year. Scientists can tell the difference in two ways: by the solar latitude at which the sunspot region emerges and by the polarity of the sunspot region.

NASA/NOAA declared solar minimum as December 2019, when the smoothed sunspot number minimized. It sure looks like we're on the way up now. Although we're still essentially at solar minimum, let's hope for some decent propagation on the higher HF bands in the upcoming contests as Cycle 25 ascends.

Remember that the smoothed values are six months behind the monthly mean values - that's a result of how the smoothed values are calculated from the monthly mean values."

In addition to the study of propagation and sunspots that Carl does there is considerable activity at NASA and the European Space Agency to gather extensive data from satellites headed around the sun. Currently the Parker Solar Probe (1) (launched on 8/2018) and Solar Orbiter (2) (launched on 2/2020) are sophisticated units capable of gathering enormous amounts of data about the sun. These satellites will yield early warnings of solar flares, solar wind changes and other disturbances. This is important to hams as well as many critical electronic systems on earth. Some interesting websites are noted below as well current views of the sun.

Thanks to Carl for sharing his website articles.

73's,

Jerry, W9KTP

https://www.nasa.gov/content/goddard/parker-solar-probe

https://www.esa.int/Science\_Exploration/Space\_Science/Solar\_Orbiter

https://umbra.nascom.nasa.gov/newsite/images.html

## **Tower Clamp System**

Alan Pitts, W1PIT sent this is to me.

This is part of a mast aligning and holding fixture I made for my HDBX TOWER. It allows changing rotors in the air (48 ').



# DECEMBER ARRL DX LISTINGS By Jerry Hess

This week's bulletin was made possible with information provided by KD7WPJ, The Daily DX, the OPDX Bulletin, 425 DX News, DXNL, Contest Corral from QST and the ARRL Contest Calendar and WA7BNM web sites. Thanks to all.

MALDIVES, 8Q. Marko, N5ZO and Oliver, W6NV are QRV as 8Q7ZO and 8Q7NV, respectively, until December 2. They will be active as 8Q7ZO in the CQ World Wide DX CW contest. QSL 8Q7ZO direct via OH0XX and 807NV direct to home call.

EAST MALAYSIA, 9M6. Saty, JE1JKL is QRV as 9M6NA during the CQ World Wide DX CW contest. Activity will be on 40 to 10 meters. QSL via LoTW.

CUBA, CO. Members of the Radio Club de Caibarien are QRV as T46W until December 29 to commemorate the first transmissions 100 years ago by the Cuban radio pioneer Manolin Alvarez. Activity is on 160 to 10 meters using CW, SSB and various digital modes. QSL via LoTW. SPAIN, EA. Special event station EF42C will be QRV from November 28 to December 13 to celebrate the 42nd anniversary of the Spanish Constitution. QSL via EB5R.

GUERNSEY, GU. Bob, GU4YOX will be QRV in the CQ World Wide DX CW contest on 40 meters. QSL via bureau. In addition, look for Dick, GU4CHY to be QRV in the contest on 20 meters. QSL direct to home call.

ITALY, I. Raf, IH9YMC will be QRV from Pantelleria Island, IOTA AF-018, during the CQ World Wide DX CW contest. QSL via LoTW. ST. VINCENT, J8. Oleh, UR5BCP is QRV as J8/UR5BCP until November 28. Activity is on the higher HF bands using mainly digital modes. This includes some limited activity in the CQ World Wide DX CW contest. QSL via KD7WPJ.

JAN MAYEN, JX. Erik, LA2US is QRV as JX2US until the end of March, 2021. Activity is on 160 to 12 meters using CW and FT8 in DXpedition mode. QSL to home call.

US VIRGIN ISLANDS, KP2. Daniel, K8RF will be QRV as NP2J in the CQ World Wide DX CW contest on 160 meters. QSL direct to home call. FINLAND, OH. Members of the Market Reef DX Association will be QRV as OG1XMAS from November 29 to December 26. Activity will be on all bands and modes. QSL via LoTW.

ALAND ISLANDS, OHO. Juha, OH2N, Kari, OH2XX, Jukka, OH6DD and Tomi, OH6EI plan to be QRV as OH0Z in the CQ World Wide DX CW contest. QSL via W0MM.

ARUBA, P4. John, W2GD is QRV as P40W until December 1. Activity is on 30, 17 and 12 meters as time permits. This includes being an entry in the CQ World Wide DX CW contest. QSL via N2MM.

NETHERLANDS, PA. Special event stations PA20XMAS, PB20CLAUS and PD20SANTA will be QRV during December. QSL via LoTW.

BONAIRE, PJ4. Martin, DL6KR plans to be QRV as PJ4/DL6KR in the CQ World Wide DX CW contest. Operators DL3KMS, DL1COP and DC7MO are QRV as PJ4/homecalls until November 29. QSL to home calls.

SWEDEN, SM. Lars, SM3EAE and Goran, SM5SIC will be QRV as SI9AM in

the CQ World Wide DX CW contest. This will be the last activity from the King Chulalongkorn Memorial Amateur Radio Society Visitor's station. QSL via SM3FJF.

TURKS AND CAICOS ISLANDS, VP5. Jim, K4QPL will be QRV as VP5M in the CQ World Wide DX CW contest. QSL direct to home call. INDONESIA, YB. Look for YB0ECT to be QRV in the CQ World Wide DX CW contest on 20 meters. QSL via W2FB. In addition, Yohanes, YB2DX plans to be QRV in the CQ World Wide DX CW contest as an All Band entry. QSL direct to home call. NEW ZEALAND, ZL. Geoff, ZL3GA, Paul, ZL4TT and Phil, ZL3PAH will be QRV as ZL3X in the CQ World Wide DX CW contest. QSL via LoTW. PARAGUAY, ZP. Manu, ZP9MCE plans to be QRV in the CQ World Wide DX CW contest with a focus on the low bands. QSL via LoTW. THIS WEEKEND ON THE RADIO. The ARRL EME Contest, CQ Worldwide DX CW Contest, NCCC RTTY Sprint, NCCC CW Sprint and RTTYOPS Weekend Sprint are all on tap for this upcoming weekend. The OK1WC Memorial, QCX CW Challenge and K1USN Slow Speed Test are scheduled for November 30. The RTTYOPS Weeksprint, Worldwide Sideband Activity Contest and QCX CW Challenge are scheduled for December 1.

Please see November QST, page 74, December QST, page 63, and the ARRL and WA7BNM contest web sites for details.

Tom W8FIB, who has moved down to the southern part of the State sent this link in about two YLs.

A Tale of Two W7HERs

https://forums.grz.com/index.php?threads/a-tale-of-two-w7hers.733239/

#### NWIDXC had 3 stations reporting Field Day results.

Chuck Hill, KC9OYE and Jerry Hess, W9KTP were two of the submitters. I was not able to find out who the last one was. Northwest Indiana DX Club Score 1,226 - 3 entries

### CQ INQP 2020 Scores

CLUB COMPETITION Third Place goes to:

Northwest Indiana DX Club (5 logs) W9DZ, W3ML, AJ9C, N9RD

224907

# Thanks to all who participated in the contests and acknowledge our Club in their results.

Tom, W8FIB forwarded this message to us.

Hello to TS-890 members from Japan,

According to a tweet from Japanese ham shop (CQ ohm), JVC Kenwood got a severe impact on semiconductor supply for its radio production, due to semiconductor factory fire of Asahi Kasei Micro (AKM) in Nobeoka, Japan, in October.

AKM is known to be one of the high precision chip suppliers of its sort. JVC Kenwood sent a letter to many domestic retail shop that its radio equipment production, mostly transceivers, received a big influence.

Most important for us in this TS-890 group is that the tweet mentioned that "TS-990 and TS-890 may be discontinued after the current AKM chip stock will have run out."

Was very surprised to read this, and just wanted to share the news.

73s,

Nicky, JH8JNF

#### From Dave – K9FN

I have decided to sell my remote antenna tuner. This is NOT an automatic tuner. It currently sits at the base of my vertical controlled by a box sitting on my desk.

The tuner is a Model AT-615U, made by Hamware.de in Germany. I bought mine from Array Solutions in 2016. My total investment is about \$2800, including 125 feet of control cable.

Here is a link to the manual:

http://www.hamware.de/hardware/tuner615U/short%20form%20manual%20615U-E.pdf

As an unbalanced tuner, this can be used to feed a long wire, a vertical, inverted L etc. It could be used to feed an open wire fed loop or dipole with a balun at the output of the tuner. The tuner has both a coax output, and a single wire output.

I confirmed more than 85 countries on 160 meters, with just a 30' vertical after putting this tuner into service.

I would prefer to not ship the unit but can do so at additional cost. My guess is that packing and shipping will total \$50 to \$75.

I will gladly answer any questions I can and would be very happy to demonstrate the unit here at my home in West Lafayette.

I am asking \$1200 and, being a ham, will certainly entertain SERIOUS offers.

Thanks, de Dave – K9FN 765-714-7618

You may call, but if I don't recognize your number I may not answer. If interested email first and we can arrange to talk on the phone if appropriate.

### Please email me directly: dpbunte@gmail.com

If you have ham items for sale, email me a list along with prices and contact information. I will put it in the next newsletter.

I want to thank those that have been sending in articles for the newsletter. All items are appreciated.



Until Next Time,

**73** 

John

W3ML

http://nwidxclub.weebly.com/



DX



