



## Eastern Iowa DX Association

*An ARRL affiliated club - Established 1975*

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January 2020

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### President's Propagation, Pontifications and Prognostics

IS IT TIME FOR NEW BLOOD?

In December 1953 I rushed home from school each day to look in the mailbox with excitement hoping that small envelope from the FCC had arrived. Finally a few days before Christmas the good news told me I was WN7UZR. I ran inside and turned on the rig I had set up and called CQ. Terror, someone came back. I shut off the radio and ran outside! A couple hours later I got up the nerve to make my first QSO. It was great although a bit shaky. That was 66 years and a few

## Member News

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- Jeff Woods on 160

## Logbook

## CQ Test

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- Feds and your garage door
- Message in a bottle

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## Club Officers:

### President:

Jim Spencer WØSR

### Vice President:

Craig Fastenow KØCF

### Secretary:

David Christ KØLUM

### Treasurer:

Mike Nowack NA9Q

### Repeater Committee:

Jason Joens NRØX

### Membership Committee:

Jim Spencer WØSR

Tom Vavra WB8ZRL

Nelson Moyer KUØA

## Packet Cluster:

WB8ZRL.no-ip.org:7300

Repeater: NØDX/R

days ago and I can remember it like it was yesterday. What fun.

Recently I was thinking about how fortunate I am to have found amateur radio at an early age.

Probably most of us are thankful for this wonderful hobby and all it has given us. What other hobby can offer so much? And if you want to try something new, there are so many choices. Over the years I've been into rag chewing, emergency communication, fox hunting, traffic handling, building radios, contesting, chasing DX, experimenting with antennas and I even tried 18 years of politics—as a member and chair of the DX Advisory Committee. I have been given much by the hobby and I've tried to repay some of that by volunteering.

Many organizations, like the EIDX, depend entirely on volunteers to carry out their missions. If a number of people each take a small part great things can be accomplished. I've been a little concerned about the EIDX at times. We continue to have nice turnouts and we have had really good programs. The officers have given us great leadership. Everyone seems to enjoy the meetings and the fellowship. Many close friendships have been made and continue. When we formed the EIDX 45 years ago none of us dreamed it would be this

144.59 / 145.19 (tone 192.8)

successful.

[www.EIDX.org](http://www.EIDX.org)

Web Master:

Craig Fastenow KØCF

Newsletter Editor:

Bob Lee WØGXA

[rclee2266@gmail.com](mailto:rclee2266@gmail.com)



Facebook EIDX

Attendance is down a little now and we can all help by encouraging members we know to attend. Also invite and encourage anyone you know who has any interest in Contesting and/or DXing. They do not need a great station or high country counts, just an interest and willingness to show up. Not only is it fun but they can learn from all of the experience we have as active amateurs.

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My last point is about EIDX leadership. I would really appreciate your input on this important topic. For years we have had difficulty getting members to “run” for office, especially for the president. Why the reluctance? I suspect there is fear that it is just too much work. Or some may feel uncomfortable leading a meeting. Are these correct? Do you have any ideas that would make it easier to attract candidates?

One thing that I think would help is to spread the jobs out even more and involve more members. We have done that for years by using committees. They usually work well and some have been up and running for a long time. We have a Membership Committee, a Repeater Committee, a DXpedition Funding Committee and just recently an AV Committee. These are functioning although additional members are needed for some of them.

At the last two meetings I've promoted forming some new committees. A Nominating Committee should be able to take a longer view on getting volunteers interested in the various positions and recruited. I'm happy to report that Rich, W3ACO, has agreed to lead the Nominating Committee and he is looking for a little help.

Another idea is to form a Program Planning Committee. I've not had

volunteers yet but I think it is an important function and key to meeting interest and attendance. It also can be fun. Anyone want to help out?

Another idea I've discussed with a few of you is to rejuvenate the Contest Committee. Our club has always had a focus on both DXing and on Contesting. We could do more and try to recapture the fun and excitement of even part-time contesting. It is not for everyone but even a few hours helping contribute to aggregate EIDXА scoring can be satisfying.

Is the use of committees the best approach? It will free up some time for the officers which might make those jobs more enticing to members who have not recently served.

The president's responsibilities would narrow to just a few items:

- Schedule meetings
- Organize and outline the meeting agenda
- Facilitate the meeting
- Write a President's Column for the EIDXА Newsletter

This is certainly a reduction in duties. Does this make the job more acceptable to some of you? What else do we need to do?

Now let me address the title of this column--IS IT TIME FOR NEW BLOOD? Newer members have asked me why we are not doing this or that, things we could easily do with the proper leadership. Getting back into contesting would be one of those areas we could energize. Why are we not asking the question, what should the EIDXА be doing in 2020 and beyond? It seems that new leadership, probably younger as most are, would be ideal to lead those discussions. Here is your chance.

We will discuss this some at the next meeting. My previous requests have yielded some responses and opportunities for follow up which I plan to do. Send me or any club officer an email and let us know what you think about these ideas and what we might do to help. We all should be concerned about EIDXА direction and commitment and I hope these suggestions get the ball rolling.

I wish all of you a great 2020 with fewer politicians and a lot more sunspots.

## Musings from the lunatic fringe

Bob WØGXA

### Merry Christmas from the Lee's



L to R: James, Lucy, Bob, Marty, Harry, Katie



The twins and their parents  
L to R: James, Lucy, Chelsea, Harry

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*Thanks for all of the contributions to the newsletter!*

*Keep those cards and letters coming.  
The newsletter is only as good as you make it!*

*- Bob*

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## Club News and Administrative Items

### **Minutes of the EIDXA meeting October 18, 2019**

Jim WØSR opened the meeting at 7:30.

25 attendees introduced themselves with name, call, and QTH.

There were no corrections to the July 2019 minutes as published in the club newsletter and website.

Rich W3ACO acting as the nominating committee said that the current officers were willing to continue for another term. There were no nominations from the floor so a motion passed to elect the proposed slate.

President — Joe WØSR  
V. President — Craig KØCF  
Secretary — David KØLUM  
Treasurer — Mike NA9Q

We need two volunteers to join W3ACO on the nominating committee.

Treasurer's Report Mike NA9Q:

We ended the year with a slight increase in funds.

Dues for the coming year are due.

18 members have not paid their 2019 dues

Membership Tom WB8ZRL:

No outstanding applications.

DX funding Mike NA9Q, Terry WØAWL, Glenn WØGJ:

Glenn is at Pitcairn.

Nothing special on the horizon.

DX Cluster Tom WB8ZRL

Minor maintenance done. It is working fine.

Website Craig KØCF:

Website is working fine.

Repeater Steve NUØP, Jason NRØX

Neither present, no report

Program committee

WØSR suggested that we have a program committee to help the president.

It is hoped that WØGJ can present one program a year. Terry WØAWL suggested a show and tell evening

ARRL Director KØDAS

New magazine "On the Air" coming out aimed at newer licensees. It will be available to all ARRL members but only it or QST will be mailed. The one not chosen can be read on-line.

The chair of the DX advisory committee is John Yodis K2VV who lives in the St. Louis area. Your comments and ideas about DX are welcomed by him.

DX & ARRL banquet and Winterfest 2020 Rod KØDAS  
third week in January — 2 days. Speakers will be ARRL CEO and Craig K9CT who has spoken at EIDXA

EIDXA hats — Sam KØAFN

Still available, part of proceeds go to EIDXA

Does DXCC need to be changed or enhanced ?

WØSR led a discussion of W9KNI's suggestions to level the field for newer hams. No consensus was achieved.

During the break a drawing was held.

Tickets were sold for two items.

Daiwa CN-901 HP3 cross needle power/SWR meter good for full legal limit, 1.8-200 MHz donated by W3ACO

AEA Pakratt PK-232 MBX Multimode data controller donated by WØSR.

The same person won both but has donated them back to the club to be raffled again next meeting.

A fine program on WSJT/FT8/FT4 was presented by AI KØVM.

His slides can be found on the EIDXA website at

< <http://www.eidxa.org/Meetings/EidxaWSJT.pdf> >

## NEXT MEETING

January 31, 2020

Social Hour 6:30 PM

Meeting & Program 7:30 PM

Meeting and location information [here](#)

Program: Join us as our very own Glenn Johnson regales us with stories of his latest exploits

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### Card Checkers

We have three club members who can check your QSL cards

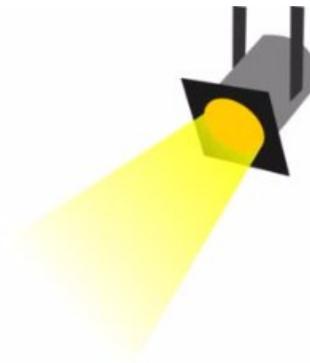
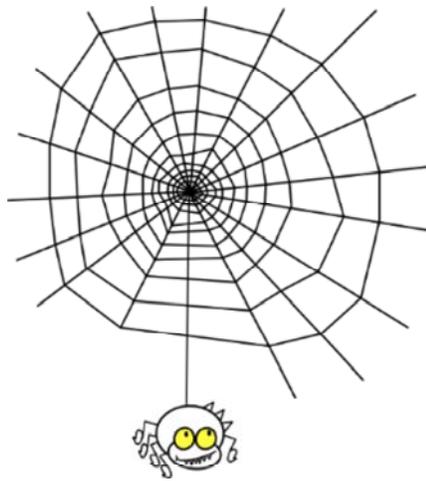
- Tom, WB8ZRL
- Glenn, WØGJ
- Mike, NA9Q

Contact info can be found here:

<http://www.arrl.org/dxcc-card-checker-search>

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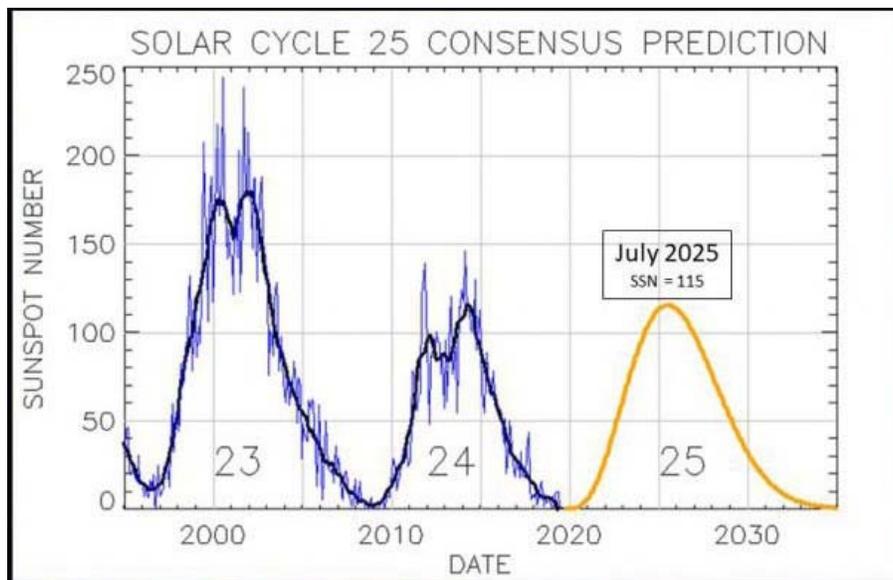
## Member Spotlight



Nothing to report this month. If you haven't been featured in the newsletter, let me know. We'd love to do a story.

## DX News

### SOLAR CYCLE 25 FORECAST UPDATE



published: Monday, December 09, 2019 22:30 UTC

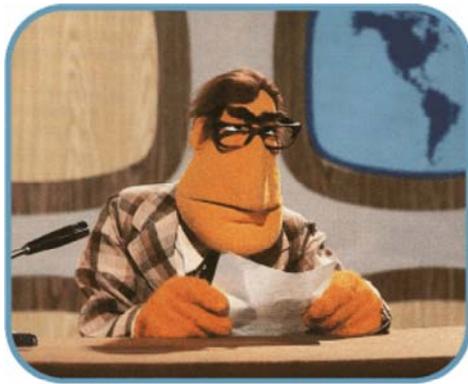
The NOAA/NASA co-chaired, international panel to forecast Solar Cycle 25 released their latest forecast for Solar Cycle 25. The forecast consensus: a peak in July, 2025 (+/- 8 months), with a smoothed

sunspot number (SSN) of 115. The panel agreed that Cycle 25 will be average in intensity and similar to Cycle 24.

Additionally, the panel concurred that solar minimum between Cycles 24 and 25 will occur in April, 2020 (+/- 6 months). If the solar minimum prediction is correct, this would make Solar Cycle 24 the 7<sup>th</sup> longest on record (11.4 years).

*... hope is the last thing to die*

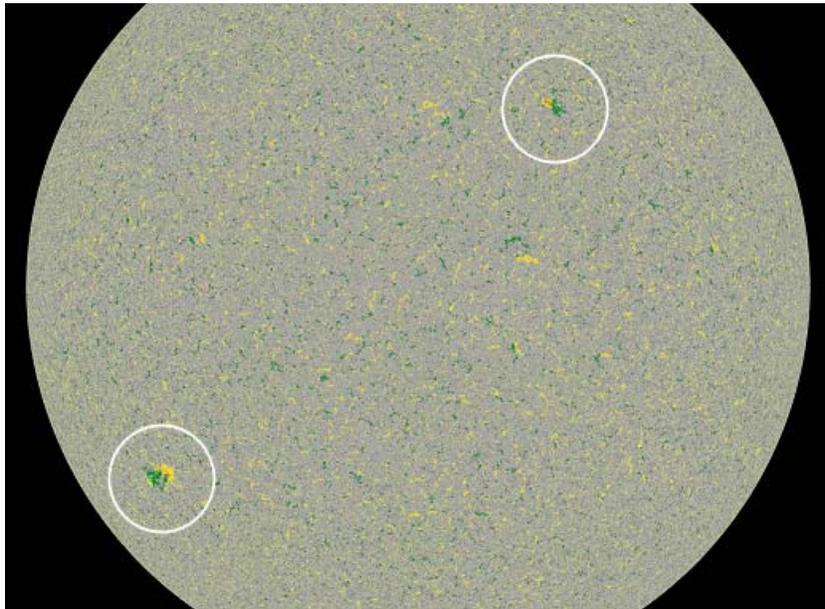
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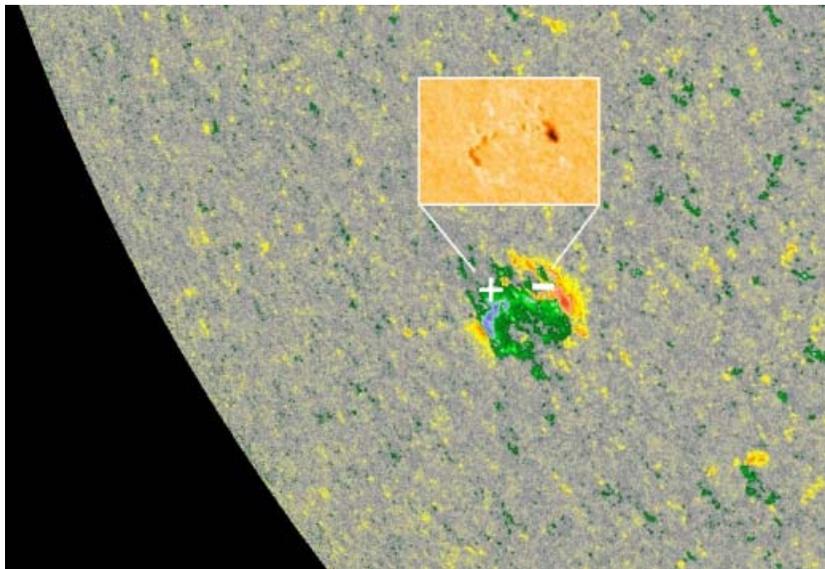
**THIS JUST IN...**

## TWO SUNSPOTS FROM THE NEXT SOLAR CYCLE

Solar Cycle 25 really is coming. Today, for the first time, there are two new-cycle sunspots on the solar disk--one in each hemisphere. This map of solar magnetic fields from NASA's Solar Dynamics Observatory shows their location:



We know these sunspots belong to the next solar cycle because of their magnetic polarity. Simply put, they are backwards. According to Hale's Law, sunspot polarities flip-flop from one solar cycle to the next. During old Solar Cycle 24, we grew accustomed to sunspots in the sun's southern hemisphere having a  $-/+$  pattern. However, look at today's southern sunspot:



It is the opposite:  $+/-$ . This identifies it as a member of new Solar Cycle 25.

Likewise, today's northern sunspot has a reversed polarity compared to northern spots from old Solar Cycle 24. It, too, therefore, belongs to Solar Cycle 25.

The sun is currently in Solar Minimum--the nadir of the 11-year sunspot cycle. It's a deep Minimum, century-class according to sunspot counts. The scarcity of sunspots has been so remarkable that it has prompted discussion of a possible "extended Minimum" akin to the Maunder Minimum of the 17th century when sunspots were absent for decades. Such an event could have implications for terrestrial climate.

Today's new-cycle sunspots (along with isolated new-cycle spots earlier this year) suggest that the solar cycle is, in fact, unfolding normally. A new Maunder Minimum does not appear to be in the offing. Forecasters expect Solar Cycle 25 to slowly gain strength in the years ahead and reach a peak in July 2025.

## Feature Articles

### Digital Modes A comparison in DXpeditions

*From CWOps reflector - Ed.*

Over the past months there has been chatter on these reflectors about the effect of the newer digital modes on CW DXing.

Since there are 2 very active DXpeditions operating right now, I thought that I'd compare their "mix of modes" with the past.

For the "past" to compare with, I chose the 1997 VK0IR expedition to Heard Island. They had a total of 80971 QSO's logged, and the breakdown by mode was:

VK0IR Total QSO's 80971  
CW 56%  
PH 41%  
DIGI 3%

Here is the mix for the two ongoing ones, from reports as of about 0100Z this evening.

VP6R Total QSO's 46873

CW 48%

PH 20%

DIGI 32%

5K0K Total QSO's 47534

CW 46%

PH 22%

DIGI 32%

So, comparing to 22 years ago, digital has certainly risen in the ranks, from 3% to 32%, but the rise has been much more at the expense of Phone. Phone contacts are down about 19%, while CW percentage is down about 9%.

And CW remains strongly as the preferred mode by DXers.

73, de Hans, KØHB

"Just a boy and his radio"™

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## **George Laurer, co-inventor of the barcode, dies at 94**



Barcodes, which are made up of black stripes of varying thickness and a 12-digit number, help identify products and transformed the world of retail.

They are now found on products all over the world.

The idea was pioneered by a fellow IBM employee, but it was not until Laurer developed a scanner that could read codes digitally that it took off.

Laurer died last Thursday at his home in Wendell, North Carolina, and his funeral was held on Monday.

It was while working as an electrical engineer with IBM that George Laurer fully developed the Universal Product Code (UPC), or barcode. He developed a scanner that could read codes digitally. He also used stripes rather than circles that were not practical to print.

The UPC went on to revolutionise "virtually every industry in the world", IBM said in a tribute on its website.

In the early 1970s, grocery shops faced mounting costs and the labour-intensive need to put price tags on everything.

The UPC system used lasers and computers to quickly process items via scanning. This meant fewer pricing errors and easier accounting.

The first product scanned, in Ohio in June 1974, was a packet of Wrigley's Juicy Fruit chewing gum. It is now on display at the Smithsonian National Museum of American History in Washington.

Fellow IBM employee, Norman Woodland, who died in 2012, is considered the pioneer of the barcode idea, which he initially based on Morse code.

Although he patented the concept in the 1950s, he was unable to develop it. It would take a few more years for Laurer to bring the idea to fruition with the help of low-cost laser and computing technology.

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## **Jurassic Journal**

- A look back in time -

Tom Vavra WB8ZRL

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*A round of applause please for  
Tom, WB8ZRL.*

*Tom immediately volunteered to do the Jurassic Journal column for the newsletter and has been a steady fixture since the beginning.*



*I certainly enjoy reading the history of these operations as I assemble the newsletter.*

*Bob*

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Twenty years ago, the winter of 2020

From my log of the first three months of 2000. We had survived the Y2K rollover and returned our attentions to working DX.

4U1UN - The United Nations station was quite active. It is good to see them back on the air again.

CEØZ - CE6TBN, CE6JOE, CE6SAX, XQ3SAI and JA7AYE were active from Juan Fernandez for several weeks on 80-10 meters.

XZ - A large group descended upon Thahtay Kyun Island in Burkina Faso. They planned to operate for 3 weeks, running eight stations primarily on 80-10M. They also had dedicated stations with specialized operators for Top Band, RTTY and 6M. XZØA was the call, and they made 75K QSOs.

The list of operators included AF7O, EA5XX, G3VMW, G3NOM, JA1UPA, JA1UT, JR0CGJ, K6RKE, K7TR, K7VS, K7WX, K7ZV, KD6XH, KM5EP, N5IA, N7XYR, NA7DB, V73GT, W8AEF, WA6CDR, WF5T, WY7K, XE1L and YBØARA.

JD1 - JD1AMA was active from Ogasawara, especially on 10M.

KH4 - NZ7Q was a Navy "flyboy radioman." He deployed to

Midway 18 days per month, and handed out many QSOs as NZ7Q/KH4 while there.

FH & S79 - Roger, G3SXW and Nigel, G3TXF made a total of 26,200 CW QSOs during their visit to Mayotte (21,740 QSOs) and the Seychelles (4,460 QSOs). Each signed FH or S79 slash their own calls.

ZK1 - Adriano, IK2GNW briefly signed ZK1GNW from South Cook Islands. He then moved to Manihiki, North Cooks and was active as ZK1NCI.

VQ9 - VQ9NL was quite active from Diego Garcia. At that time the Base Commander provided a room for a club station for off-duty use. The Navy stopped doing that a few years ago, hence the current inactivity.

9M2 - JA0DMV was active as 9M2TO, handing out QSOs on 40M.

ZK2 - K7CA and W7TVF were operating from Niue as ZK2CA and ZK2VF.

VP6 - Jukka, OH2BR chose to spend some of his January in warmer climes, in this case Pitcairn Island. As VP6BR he operated all bands, all modes (20 years ago, this meant CW, SSB and RTTY).

CEØ - Vladislav, GØKBO and his brother Victor, UA6AF were active as CEØY/GØKBO and CEØY/UA6AF from Easter Island. Several other operations were also on the island during our winter.

FOØ - The team on Clipperton Island were active as FOØAAA for almost one week. 75,107 QSOs were logged by the deserving.

TXØDX - The Chesterfield Islands were activated as an all time new one for all DXers. They went on the air at 0000Z 23 March 2000. The team consisted of FK8GM, FK8HC, JA1BK, N5KO, N7NG, OH1RY, OH2BC, OH2BH and OH2RF. They operated for 7 days and logged 72,654 QSOs, of which 22,893 were unique calls. They had four HF stations, but tried to have two of them on 15M (CW and SSB) at all times. This was their go to band. Times have changed.

4W - Another new one! East Timor was assigned the prefix 4W

and it was added to the DXCC list 1 March 2000. But QSL cards for QSOs made after that date were not accepted until October 1, 2000.

I don't remember anything like this happening. At least six stations were active from East Timor during the first month: Jose, 4W6EB/CT1EEB; Antonio, 4W6GH/CT1EGH; Thor, 4W6MM/TF1MM; Ross, 4W6UN/VK8UN); Nev, 4W6/VK2QF; and Bernie, 4W/W3UR.

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Ten years ago, the winter of 2010

Solar activity was a bit better in 2010 than it will probably be in 2020.

Solar Flux in 2010 ranged between 73 and 96. The A-index between 0 and 15.

NRØX -- Numerous log entries chatting with Heinz, KØEGQ and WØAWL as they snowbirded in Texas.

HBØ -- Tom, now DM9EE, was portable in Liechtenstein signing HBØ/DL2OBO.

FK8 -- FK8CP was very active on Top Band, usually with an excellent signal.

FO - The German team (DL1AWI, DL3APO and DL5XU) started activity from Raivavae, Austral Islands without essential parts of their equipment, which were lost in transit. The missing items (including the antennas, an amplifier and a mast) were eventually recovered, but they used only wires until the antennas arrived. They used special callsign TX3D.

PYØF - PY2XB/PYØF activated Fernando-de-Noronha. He picked my call out of the cw pileups three times, including Top Band.

FO - Jacques/F6BEE, Nigel/G3TXF and Gilles/VE2TZT joined Phil/FO8RZ (F5PHW) in February for an expedition to Tahiti signing TX4T that included participation in the CQ WW WPX RTTY and ARRL CW DX Contests. Outside of the contests they focused on the low bands.

Z2 - Mirek, VK6DXI, activated Z21DXI in Zimbabwe. He was formerly SP5IXI, and is now a silent key.

H4Ø - Timotu was activated by H4ØMS (DL2GAC), H4ØFN

(DK9FN), and H4ØFK (DG1FK) for two weeks. Before and after Timotu they were active from Solomon Islands.

C2 - Dieter, DJ2EH, and his wife Anneli, DL8NBH were active as C21DL and C21YL from Nauru. Activity was all bands, mostly CW with some RTTY and SSB.

5N - Ivan, OM3CGN, was 5N7M.

3B9 - John, G3LZQ signed 3B9WR from Rodrigues Island during the entire month of March. He focused on the low bands, but I could never hear him on TB, so I settled for a contact on 80M,

S7 - Gav, GMØGAV and Rob, GM3YTS signed S79GM from Mahe, Seychelles for the month of March. All bands with a focus on LF, mainly CW with some RTTY. Their log ended up with 17K CW Qs and only 700 RTTY Qs.

Sunspot cycle 24 was only two years old, and activity was increasing. Good times for Dxers.

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*Remember what I said about the spectrum defense fund? - Ed.*

## FCC Formally Adopts Proposals to Remove Amateur 3-GHz Band, Invites Comments

12/17/2019

At its December 12 meeting, the FCC formally adopted a Notice of Proposed Rulemaking (NPRM) in WT Docket 19-348 and invited comments on its plan to remove “existing non-federal secondary radiolocation and amateur allocations” in the 3.3 – 3.55 GHz band and relocate incumbent non-federal operations. The FCC said it’s seeking comment on appropriate “transition mechanisms” to make that happen. ARRL has indicated that it will file comments in opposition to the proposal. The amateur allocation is 3.3 – 3.5 GHz. The NPRM comes in response to the MOBILE NOW [Making Opportunities for Broadband Investment and Limiting Excessive and Needless

Obstacles to Wireless] Act, approved by the 115th Congress to make available new spectrum for mobile and fixed wireless broadband use.

“By proposing to delete the existing non-federal secondary allocations from the 3.3 – 3.55 GHz band, we are taking an important initial step towards satisfying Congress’s directives and making as much as 250 megahertz of spectrum potentially available for advanced wireless services, including 5G,” the FCC said in the Introduction to its NPRM.

Currently, the entire 3.1 – 3.55 GHz band is allocated for both federal and non-federal radiolocation services, with non-federal users operating on a secondary basis to federal radiolocation services, which have a primary allocation, the NPRM explains.

The FCC said it is seeking comment on relocating non-federal licensees to another band. With respect to amateur operations, the FCC invited comments on whether sufficient amateur spectrum exists in other bands that can support the operations currently conducted at 3.3 – 3.5 GHz. The 3.40 – 3.41 GHz segment is earmarked for amateur satellite communication. “We seek comment on the extent to which the band is used for this purpose, whether existing satellites can operate on other amateur satellite bands, and on an appropriate timeframe for terminating these operations in this band,” the FCC said. If non-federal licensees are relocated to 3.1 – 3.3 GHz band, the FCC proposes that they continue to operate on a secondary basis to federal operations, consistent with current band allocations.

Some comments began to arrive before the FCC formally adopted the NPRM, as it points out in a footnote. Kevin Milner, KDØMA, the secretary/treasurer of the Ski Country Amateur Radio Club in Colorado, has argued that the club’s equipment cannot be re-channelled below 3.4 GHz, and the club is seeking relocation costs. Devin Ulibarri, W7ND, told the FCC that amateur networks in the current band cannot move easily into other amateur allocations because there is no readily available commercial equipment to support the bandwidth, the FCC recounted.

In the event the proposed amendments are adopted, the FCC “seeks comment on relocation options and on transition and protection mechanisms for incumbent non-federal operations.”

Also at its December 12 meeting, the FCC considered another NPRM

in WT Docket 19-138 that would “take a fresh and comprehensive look” at the rules for the 5.9 GHz band and propose, among other things, to make the lower 45 MHz of the band available for unlicensed operations and to permit “cellular vehicle-to-everything” (C-V2X) operations in the upper 20 MHz of the band. The FCC is not proposing to delete or otherwise amend the amateur allocation, which would continue as a secondary allocation, but the primary allocation for 5.850 – 5.925 GHz would change. The amateur radio 5-centimeter allocation is 5650.0 – 5925.0 MHz, and the NPRM, if approved, would address the top 75 MHz of that amateur secondary band. Although no changes have been proposed to the amateur allocation, an increase in primary use is anticipated, which could restrict secondary amateur use.

The Amateur Radio Emergency Data Network (AREDN) has offered its voice in challenging the FCC proposals on the two bands, saying their adoption would “eliminate our use of the most-effective resource hams have to build its networks.”

“The AREDN Project is able to leverage low-cost commercial devices solely because they are designed to operate on adjacent allocations,” AREDN said on its website. “Moving to other allocations would be difficult if not impossible without a complete redesign, manufacture, purchase, and installation of new custom amateur hardware and software..., raising the price out of reach for the typical ham.”

Interested parties may file short comments on WT Docket 19-348 via the FCC’s Electronic Comment Filing Service (Express). Visit the FCC “How to Comment on FCC Proceedings” page for information on filing extended comments.

## Member News

QSL from 41 years ago...



Attached is a screen grab of a LoTW QSL I received today. I have not operated any HF (excepting Field Day at CVARC) since early June of 2018 when we moved to the country. Never the less, I frequently check LoTW to see if any QSLs are added.

When I joined LoTW, I uploaded contacts from old log books. I am often pleasantly surprised to see other hams have done so as well.

When this contact was made I was living in the trailer court in Anamosa using a vertical antenna fed against the metal roof of my mobile home. The rig was a TS-520 I won at the 1976 ARRL convention in Omaha.

John, WØGN

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First Person:

Jeff Woods and ARRL

160 contest

2019 edition



My ARRL 160m contest efforts always start out behind the 8-ball. This year was no exception. Despite starting the contest 8 hours after the gun, it ended as my best ARRL 160 effort to date and one of the most enjoyable contest experiences I've ever had.

For the first time in many years, the dawn of ARRL160 2019 found me reasonably prepared. My low-band efforts are center around an array of 7 Beverage antennas. These antennas are located on farmland that my neighbors very generously allow me to use after Thanksgiving Day and before St. Patrick's Day. Fortunately, I received clearance to go to work a little early this year. That still meant taking a half-day off work Friday to finish stringing the last of the wires and most of the feedlines.



Figure 1 - Beverages in an empty field

By 4:30 pm the day of the contest, all the wire and cable had been run.

Worked then turned toward completing a major overhaul of my homebrew 160m kilowatt amplifier. Priority goes to antenna installation when there's daylight and good weather. I figured I had 2 or 3 hours of work left to do on the amp.

At quarter to midnight, 8 hours into the contest, I eased the amp back into the station rack with an MFJ tuner still serving as the cathode match. Time was wasting and it was delivering over a kilowatt out the pipe with the tuner. A real matching network could wait. The first Q went into the log at 0607z. I found a clear frequency and began running a few minutes later. S59A was the 6th call in the log. There was no thunderstorm QRN and the band was hopping.

112 Qs were in the log by the time I shut it down at about 2 am. The usual Caribbean powerhouses were logged, but it was clear by then that something was wrong with my three south-facing beverages.

Tomorrow after sun-up would be the time to tackle that problem. The amplifier and transmit inverted L were doing everything they could be expected to do. I retired for a few hours' sleep happy with the day's progress.

At 6:30, I began my Saturday morning session. The highlight was working a pair of JA's on the grey-line and logging about a hundred more Q's. Anything in North America was easily worked. As the rate petered off, I began to address the issues uncovered the night before.

Since it was still chilly out, I opted to work the amplifier's input match first. The MFJ manual tuner that had found the sweet spot for a good cathode match was terminated in 50 ohms and taken to a vector network analyzer to see what that impedance was. With the aid of a Smith chart and some junk box parts, a low-q pi network match was quickly designed and constructed. By noon the amplifier was running a solid 1300w out with an input that the exciter was happy to drive.

Science is a wonderful thing.

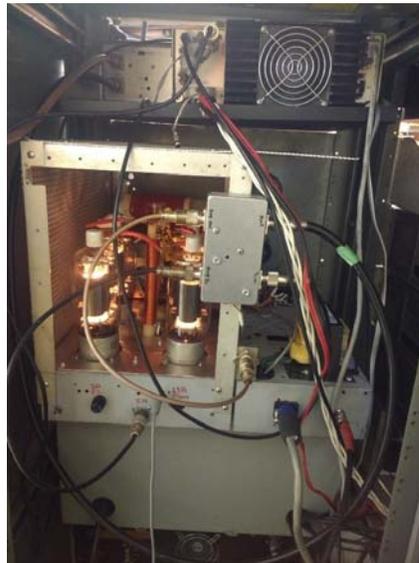


Figure 2- The amp at the start of the contest, and installed in the rack on Saturday night

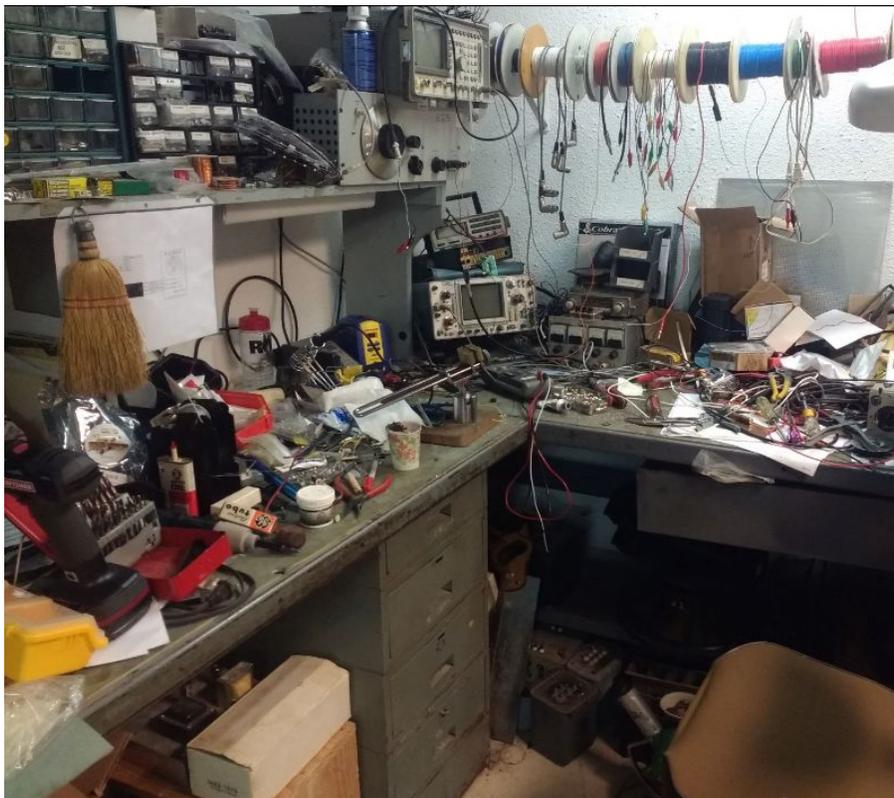


Figure 3 - No time to clean up!

The next problem to be tackled was the feedline to the three South beverages (SE-S-SW). They all shared a common feed point and were selected by applying a positive, negative, or no DC voltage to the coaxial cable. Since all three antennas were misbehaving, the feedline was suspect. To make a long story short, there were actually

three problems; two shorts and one open. It was beginning to get dark by the time the last fault was repaired. See the photo showing the open-circuit fault caused by a single small slice in a 200 ft. roll of RG-6. The shorts were caused by tiny strands of the shield that were improperly dressed when the F connector were installed. Live and learn.



Figure 4 - A nick in the cable – Marked in red to help you see it

The next few hours were nothing but pure contesting bliss. All the effort paid off. For perhaps the first time ever, all 7 beverages gave about the same signal level to the antenna. Directivity was excellent – better than in years past. The amp seemed to loaf along at 1250 watts, running stations almost continuously for the next 8-1/2 hours with just one 20-minute break to serve my biological needs. A steady stream of US/Canadian stations filled the log with occasional appearances by our European brethren to keep it interesting. I wasn't watching the rate meter, but another 667 Qs were in the log by 1 a.m. The rate had dropped to the mid 30's by then. Exhausted and elated, I crawled off to catch a few hours of sleep before the dawn rush. 4-1/2 hours later, I turned on the radio, reconnected the antenna, and was greeted by RT0F's CQ from Asiatic Russia. The ancient 813 tubes I use in my amplifier take about 3 seconds to warm up. A new country was in the log mere seconds later. The JA run never did develop on Sunday morning, despite that early tease, probably due to the salarymen getting some shut-eye before

the next workweek begins. Still, the contest finished strong with good propagation and plentiful stations. I ended up with 886 valid QSOs, 21 countries and 78 states & provinces for 99 mults. For the first time in a long time, I missed Hawaii and KH6LC's strong presence. One of the hazards of running 100% is missing points like this. Since I run unassisted, the time to hunt mults almost always results in a diminished score. Next year – SO2R!



Figure 5 - The author, enjoying a run on 160m

73, WØODS

Logbook

**WB8ZRL:** C31CT 160M, VP6R on nine bands

**W3ACO** has been busy.....

CX2CN	2019-11-27 20:50:00	15M	FT8
H40TT	2019-11-27 19:52:00	17M	CW
H40TT	2019-11-27 18:58:00	17M	CW
TX7T	2019-11-17 21:13:00	17M	SSB
TX7T	2019-11-17 20:57:00	20M	FT8
PJ5/SP6IXF	2019-11-17 18:19:00	17M	SSB
TX7T	2019-11-15 19:48:00	15M	FT8
TX7T	2019-11-15 18:00:00	20M	FT8
TX7T	2019-11-15 17:08:00	17M	CW
TX7T	2019-11-15 17:06:00	20M	CW
VK7XX	2019-11-13 19:22:00	20M	FT4
F05QB	2019-11-05 20:57:00	15M	FT8
F0/K5PI	2019-11-05 20:44:00	15M	CW
JA8LRG	2019-11-05 20:34:00	20M	FT4
JA9BFN	2019-11-05 20:33:00	20M	FT4
9Z4Y	2019-11-05 18:07:00	20M	SSB
ZL2IFB	2019-11-04 19:01:00	15M	FT8
3D2AG	2019-11-04 18:33:00	17M	FT8
8P2K	2019-11-03 20:57:00	17M	FT8

CX2CN	2019-11-03 20:52:00	15M	FT8
PU4TNT	2019-11-03 20:50:00	15M	FT8
PU2SWR	2019-11-03 20:50:00	15M	FT8
ZL3IO	2019-11-03 19:28:00	17M	FT8
OA4DOS	2019-11-03 19:06:00	17M	FT8

VP6R	2019-10-18 16:01:00	20M	FT8
VP6R	2019-10-18 18:24:00	20M	CW
VP6R	2019-10-20 11:56:00	40M	FT8
VP6R	2019-10-20 15:39:00	20M	SSB
VP6R	2019-10-20 16:19:00	15M	FT8
VP6R	2019-10-20 19:54:00	17M	CW
VP6R	2019-10-21 17:40:00	12M	FT8
VP6R	2019-10-21 18:19:00	15M	CW
VP6R	2019-10-23 16:11:00	17M	SSB
VP6R	2019-10-24 18:37:00	12M	CW
VP6R	2019-10-26 16:13:00	20M	SSB
VP6R	2019-10-26 16:14:00	15M	SSB
VP6R	2019-10-26 17:22:00	10M	SSB
VP6R	2019-10-29 16:27:00	20M	CW
VP6R	2019-10-29 16:48:00	15M	SSB
VP6R	2019-10-29 19:14:00	12M	CW
VP6R	2019-10-29 19:19:00	10M	FT8
VP6R	2019-10-30 17:14:00	17M	FT8

## insomnia

in·som·nia | \ in-'sām-nē-ə \

: prolonged and usually abnormal inability to get enough sleep

: necessary condition to do well on 160m

Glenn KDØQ has had a good 30 day run of new countries on 160m

D68CCC

FR4NT

ZD7W

5N7Q (FT8)

8R1/AG6UT

IS0SWW

HB9CZF

He reports his total stands at 204. Well done!

## CQ Test

### Upcoming Contests:

ARRL RTTY Roundup	1800Z, Jan 4 to 2400Z, Jan 5
North American QSO Party, CW	1800Z, Jan 11 to 0559Z, Jan 12
North American QSO Party, SSB	1800Z, Jan 18 to 0559Z, Jan 19
CQ 160-Meter Contest, CW	2200Z, Jan 24 to 2200Z, Jan 26
ARRL Inter. DX Contest, CW	0000Z, Feb 15 to 2400Z, Feb 16
ARRL Inter. DX Contest, SSB	0000Z, Mar 7 to 2400Z, Mar 8

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### ARRL 160M Contest - Iowa boys doing good!

Long overdue kudos go to Toni, NØNI, Bill, NØAC, and Dean, NØXR for holding the #2 spot MS HP in the recent ARRL 160 Meter Contest. These guys were beat only by the W2GD team, ten operators operating from SNJ on a former military HF antenna site sitting on a salt water marsh (of course, no advantage there).

Congratulations Toni, Bill and Dean!

## QRM

Feds admit radios interfere with garage door  
openers



**The Warrenton Training Center's 346-acre Station B stands on View Tree Mountain at the northwest edge of town.**

By Don Del Rosso  
Staff Journalist

A top-secret and secure federal government facility just northwest of Warrenton admitted Tuesday that it may be responsible for crippling dozens of garage door openers in two nearby subdivisions.

More than 70 Olde Gold Cup and Silver Cup Estates homeowners have reported that openers started to fail about two weeks ago, according to Betty Compton, Olde Gold Cup's Neighborhood Watch group coordinator.

The disturbance has affected more than 60 of Olde Gold Cup's 214 homeowners. About nine of Silver Cup Estates' 55 homeowners complained of malfunctioning door openers.

Some pointed fingers at Warrenton Training Center Station B along Bear Wallow Road, suggesting its activities somehow have interfered with the use of their garage doors.

Rarely commenting on its activities, the training center addressed their concerns in a three-paragraph statement.

"To address homeland defense needs and comply with government direction that agencies use the electromagnetic spectrum more efficiently, the Department of Defense (DoD) is deploying new land

mobile radios to installation across the country,” the statement reads.

The radios “operate in the same frequency range . . . as many unlicensed, low-powered garage door openers, which have operated in this range for years,” the training center said.

Authorized to use that frequency range for “several decades,” the defense department’s deployment of land mobile radios “is relatively new,” according to the training center.

As a result, “some users of garage door openers have experienced varying levels of inoperability that has been attributed to interference caused by the new radios.”

Garage door openers “operate as unlicensed devices, they must accept any interference from authorized spectrum users.”

The training center recently conducted a two-week test of its new radio system that apparently has coincided with the garage openers problems experienced by Olde Gold Cup and Silver Cup Estates homeowners.

To appease affected homeowners, the training center as of Tuesday, Nov. 5, will suspend use of its radio system for 30 days.

That will give homeowners a chance to “update their equipment to operate within the RF (radio frequency) spectrum guidelines,” the training center said. “After the 30-day window, DoD will re-able the new radio system permanently.”

A training center public affairs representative, who provided only his first name, contacted Fauquier Now about the prepared statement.

In a phone call Tuesday afternoon, Brandon asked to FAX the statement to Fauquier Now.

Unable to accept FAX’s, Fauquier Now asked him to email the document. After Brandon rejected the offer, a Fauquier Now reporter agreed to meet him at the facility’s visitors center off Bear Wallow Road to receive the document.

During the brief meeting at the training center, Brandon and the

facility's "commander," who identified himself as Mitch, refused to comment on the statement — after which they left the visitor center in a large, black SUV.

In interviews last week, two Olde Gold Cup residents plagued by failing openers said they believe someone should compensate them for losses related to replacing their devices and/or systems.

The training center statement made no reference offsetting neighbors' costs.

The Olde Gold Cup homeowners' association will meet at 7:30 p.m. Thursday at the Warrenton Police Department at 333 Carriage House Lane. A police department member will attend. The training center will not send a representative, Mitch said.

The Department of Defense in 2005 first acknowledged radio interference with garage door openers elsewhere.

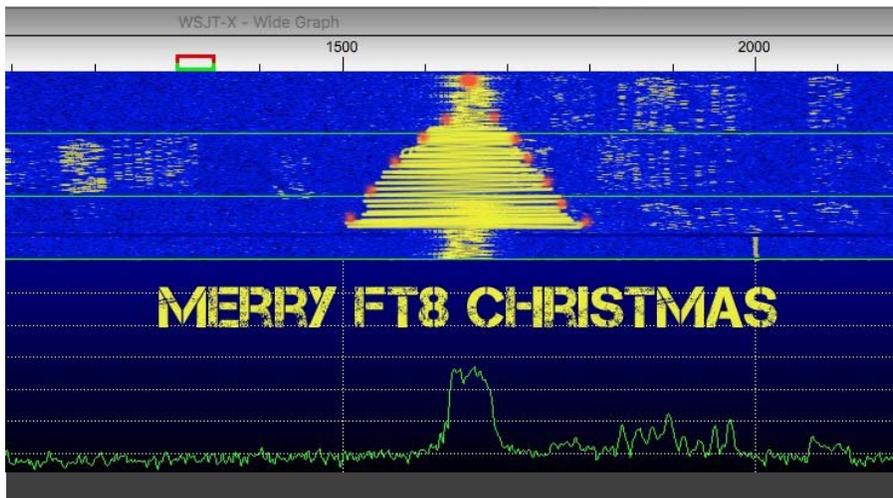
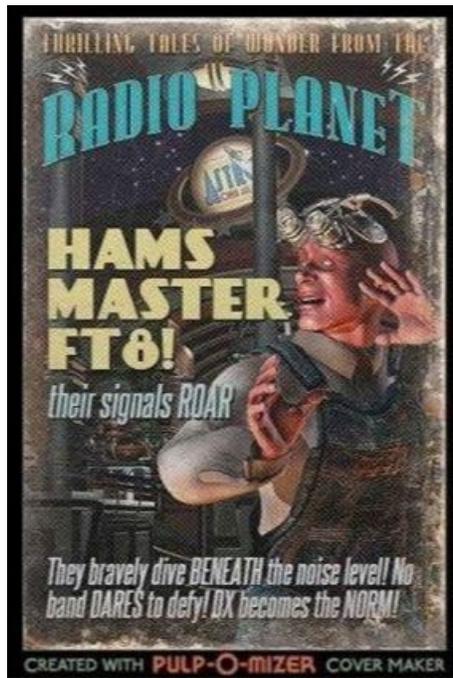
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## Message in a bottle

...and no, we're not talking about the Police

<https://www.abc.net.au/news/2019-11-03/message-in-a-bottle-on-sub-antarctic-island-keeping-secrets/11667062>

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