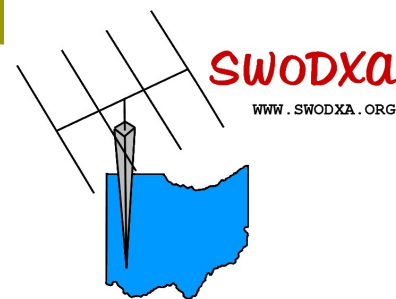




Volume 4, Issue 3

1/2021

the exchange



SouthWest Ohio DX Association

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The Prez says....Tom, NR8Z

By the time you read this, 2020 will be behind us, thankfully. While I won't miss this year one bit, there were a few positives. For one, I enjoyed more time in front of my radio working on my digital and 30M DXCC and also catching up on QSLing. While FT8 is a huge boon for me and my little pistol station, the novelty may be wearing off a little. I was tuning around the bottom of 30 meters the other day, found a VK3 calling CQ and we had a great QSO for a few minutes. I found that QSO was a nice break from the 15 second automaton.

Unfortunately, we had to cancel the in-person SWODXA holiday party in December and replace it with a virtual Zoom get together. It's just not the same! Congratulations to the top three scorers in the trivia contest. Pete, N0FW, had the highest score, Jay, K4ZLE, came in second and Dave, W8DO, brought home the bronze. Ken, KB8KE, was just edged out of the top three. It was a tough set of questions so these members deserve our admiration!

With the COVID vaccine now in distribution I'm hopeful we can get back to in person gatherings sometime in the first or second quarter of 2021. Keep your eye on the reflector and the website. The committee is getting started on the DX Dinner work, creating both a main plan and some contingency planning as well. If you'd like to help don't hesitate to contact the chairman, Mike, W8RKO, to offer your services.

73,
Tom—NR8Z



Contest University

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Registration for Contest University 2021 is tentatively scheduled to open on February 1, 2021.

Contest University Presents: "The 2021 Propagation Summit"
Sponsored by DX Engineering and Icom America.
January 23, 2021 (Saturday) from 11 AM – 3 PM (all times are EST)
via Zoom Webinar.

Contest University will host Propagation Summit on January 23, 2021. All times are USA EST.

- ⇒ 11 AM - "Update on the Personal Space Weather Station Project & HamSCI activities for 2021" - Dr. Nathaniel Frissell, W2NAF
- ⇒ Noon - "Solar Cycle 25 Predictions & Progress" - Carl Luetzelschwab, K9LA
- ⇒ 1 PM - "Maximizing Performance of HF Antennas with Irregular Terrain"
 - Dr. James Breakall, WA3FET
- ⇒ 2 PM - "HF Ionospheric Propagation" - Frank Donovan, W3LPL

There will be a drawing for an Icom IC-705 donated by Icom America and DX Engineering - both CTU sponsors. Winner must be present on Zoom to win.



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To register for this free CTU Propagation Summit Webinar please go to :

<https://zoom.us/webinar/register/WN_dflvFDxaTyakOWd_C7_puw

Stay tuned to Contest University: <https://www.contestuniversity.com/>

Tim K3LR

Contest University Chairman

60 Meters—The Channel Band

By Joe, W8GEX

I want to wish everyone a MERRY CHRISTMAS and have a safe holiday with good DXing in 2021



8Q – Maldives—G0VJG, Nobby, who is headed to Reethi Fura Island early next year gives us an update. The “License will not be issued till next year but been told 8Q7CQ will be reserved for me also told 60m will be add to license but can’t be 100% on that till I see it”, say Nobby. Dates of operation will be from January 14-29. “The world’s best QSL Manager”, M0OXO, Charles, will handle confirmations.

The following information was provided by Paul G4MWO. He is very knowledgeable about keeping us posted on new authorization’s worldwide. Thanks for all you do for 60m Paul:

AUSTRIA: Now on after a long wait. I want to thank the following for their input: K8KS & Paul G4MWO

Good News from Austria!

Today we received permission from our Government to use the 60m and 630m Band.....Great Gift for XMASHi

More Details in OEVS.COM - also available in English !

Stay well and Happy Christmas from Austria !
—Vy 73’s Mike OE5MSM

V4 – St. Kitts & Nevis John, W5JON, says he is sick of being stuck in Texas and can’t wait to get the vaccine shots and get “back in the DX loop.” His February 27, to March 27, trip to V47JA is still on and next year’s October-

November V47JA and PJ5/W5JON trip is booked too.

60 METER CONDITIONS N5KO, Trey Garlough (creator of the Cabrillo software) and a renowned op at HC8N and others, notes both A45XR and T6AA have been heard on the West Coast of NA on 60, “with big signals” at 1500Z. Trey also worked BG3ISR in CQ Zone 23 at 1530Z, on 5357 kHz FT8.

Recent Activity

5V5VJ	C31CT	9J2BS
TZ1CE	ZA/ IK2RLM	5B60ALJ
6W1TA	JX3US	E51WL
ST0P	7Q7RU	5A1AL
JT1BV	FR4OO	KL7J
A5XR	E74EBL	V31MA

Seven Habits for Chasing DX

By Jay, K4ZLE

This originally appeared in the DX Magazine, September / October of 2009. It is as applicable now as it was then. Thanks to Jay for letting me reprint this.

As a previously certified Stephen Covey 7 Habits instructor, I can attest to how important these steps are. If you know it, great to



Last issue we took a hound's perspective of the 7 habits of highly effective people in working pileups. This time we will examine a parallel set of habits exercised, in whole or in part, by the better foxes. Although most of us may never be on the far side of the pileup, knowing how to evaluate how the fox is doing may help us as hounds sniff out the completed Q quicker.

For review, the 7 generic habits from the book, *The 7 Habits of Highly Effective People*, by Stephen R. Covey are: 1) Be proactive. 2) Begin with the end in mind. 3) Put first things first. 4) Think win/win. 5) Seek first to understand, then to be understood. 6) Synergize. 7) Sharpen the saw (learn-renew). The quarry's 7 effective habits are: 1) Take control. 2) Know yourself. 3) Ignore unsociable behavior. 4) Practice spectrum stewardship. 5) Give clear instructions. 6) Work the LID, loose the log. 7) Complete the paperwork. Now, to look at them individually.

1) Take control (be proactive).

As the fox, you are the one being sought. It behooves the pack to cooperate with you and follow your lead. Don't act like an ego-maniac, but take firm control.

2) Know yourself (seek first to understand, then to be understood).

You need to know your own limitations. If you are limited to low power, have a marginal antenna and or propagation or you are operating from a rare location, you will need to employ a different set of techniques than if you are QRO, have stacked arrays, sunspots are over 200 and you are garden variety DX. Once you understand how your signal is projected into various regions, you can target your schedule and procedures for maximum effectiveness.

3) Ignore unsociable behavior (put first things first).

The easiest way to get rid of the belchers, burpers, jammers, fartars and self-deputized FCC frequency Marshals is to ignore them. Usually they are such poor operators, themselves, that they get frustrated when they can not figure out how beat the pileup. Since they can't work them, they don't want anyone else to. Can't you just picture their pitiful puss when they are ignored! It must drive them utterly mad! I love it! In the grand scheme of things, why let someone who acts like a two-bit punk cash in on spoiling your fun! (Hummm, this sounds like déjà vu, all over again!)

(cont. on next page)

7 Habits (cont.)

4) Practice spectrum stewardship (win/win).

As unthinkable as it may seem, DXing is not THE raison d'etat for amateur radio's existence. Other people with different primary interests have as much right to use the bands as we do, regardless of how rate the QTH. As such, we should practice techniques that limit the spectrum space we occupy. In other words, "Listening 14.200 and up" should NOT mean anywhere from 14.200 to 14.350!

5) Give clear instructions (synergize).

It's the little things that produce some of the biggest improvements. If we suspect the crowd to follow our instructions, we have to give clear instructions and give them in a timely manner – instructions like our ID, QSL information, where we are listening, when we will shut down, etc. In the same manner that 'Radar' O'Reilly in M*A*S*H could anticipate the Colo-

nel's every question, the good pileup operator knows just when to give instructions, how often to give QSL info or ID.

6) Work the lid, lose the log (sharpen the saw [learn – renew]).

Of course, no matter how clear the instructions or how often you ID there is always that 10 % that never get the word. Some people act as if instructions, directions and laws do not apply to them. We have to learn new, more effective ways to keep the rhythm moving. Sometimes it is better to appear to violate your own instructions and do what I call, "Work the LID, lose the log." For a legitimate QSL request from someone who thought they worked me and didn't I feel pangs of remorse when I have to say NOT IN LOG.

(cont. on next page)

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7 Habits (cont.)

However, for the lid who got worked because they persisted in ignoring my instructions, I have no qualms about drawing a happy face beside those three words. The astute hounds know what is happening when you do that because they know what 5NN NIL means when you give the lid his signal report. There are other less offensive techniques, like just ignoring the LID, but sometimes that is really hard to do and my carnal nature just can not control itself. As Flip Wilson used to say, “The devil made me do it!”

7) Complete the paperwork (begin with the end in mind).

Just as we attribute Yogi Berra to the statement, “It ‘ain’t over till the fat lady sings,” the QSO is not really complete until the paper QSL request has been answered, or the log has been uploaded to LoTW and the proper credentials presented to the ARRL. If you do not enjoy the administrative responsibilities, there are plenty of volunteers willing to help. I believe every DXer should make every effort to confirm the QSO in a timely manner and according to the wishes of the requesting station, i.e.; SASE/SAE and sufficient IRC or green stamps = direct airmail; not enough postage or money to go air mail = surface mail (for those countries who quote surface rates); not enough to send it surface or no SASE = bureau. In all cases, except bureau SWL cards, a card received should equal a card sent. (I know there are those who disagree with me, especially about bureau SWL” cards, but that can be the subject of a lively debate sometime.) Again, if you do not want to mess with QSL cards, LoTW is a great boon, especially with the plethora of computer logging programs available today.

Over the past two columns we have examined one person’s views on how to be more effective in a pileup. By necessity and by design the comments have been broad. As a result, they have also been terse and perhaps incomplete. My intent is not to write an exhaustive treatise; rather, it is to get you to think about what works for you. Hopefully, you will also look at what works and doesn’t work for others and learn from their example. Working DX entails a certain amount of art. Practice makes better artists of us all, better able to paint a more perfect picture, regardless of which side of the pile up we reside.

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Interview with Brian, EI8IU

I worked Brian and checked out his QRZ.com webpage. I thought he would be an interesting guy to send questions to and I was right! He immediately agreed to answer my questions. He can be reached at brianei8iu@gmail.com

AJ8B: How did you first get interested in amateur radio?

EI8IU: I first got introduced to radio in 1989 (or there abouts). I started a new job and during the training one of the lads brought me for lunch and before we got into his car, he put a little mag mount antenna on the roof, we got in and he turned on what I presume was a 2-meter rig, he demonstrated it, and that was it!! His call was EI8GY and sadly became SK last year. I bought a Somerkamp radio from him which went from 26 to 30 MHz so that got me on the air. I was using that until I went to live in Germany in 1991. I came home for Christmas that year and had organized to sit the Amateur License exam in Dublin on the day we flew home, I passed it and got the basic EI license (EI9ERB). I returned to Germany and exchanged that for the basic German License, done the CW test (three times) and finally became DJ2CB. On my return to EI I again exchanged that and became EI8IU...never to look back!.

AJ8B: Do you have a favorite band or mode?

EI8IU: No real favorite band, I work them all, enjoy CW, RTTY, SSTV, FT8.. I like to try all the modes but recently have spent too much time on FT8, my CW is beginning to suffer.

AJ8B: What time of day and days do you like to operate?

EI8IU: Usually try to get a bit of air time each evening as I work around the west and northwest



of EI I can never be sure when I will get home, also weekends are the best but of course there are lots of things to do around the house and family also need a bit of time hi.

AJ8B: Any secrets to your success?

EI8IU: I wouldn't class myself as being overly successful, patience helps....

AJ8B: Any tips that you can share?

EI8IU: No tips I'm afraid but to use a cliché... you get out of to what you put into it, DXCC won't happen unless you put lots of effort into it!

AJ8B: Describe what you are currently using:

EI8IU: Equipment at the moment is an Icom IC7610, SPE 1KFA 1KW solid state linear amplifier (top band and 80 not working on it at the moment), Hex beam for HF and Fan Dipole for top band and 80. Icom IC910 and Diamond X510 for VHF/UHF.

(cont. on next page)

Interview with Brian, EI8IU (cont.)

AJ8B: What advice do you have for those of us trying to break pileups to work DX?

EI8IU: Any of the rare ones that have been active over the last 6 or seven years I have worked using the linear and hex beam, two great purchases. However, like so many others I've spent hours trying to get them, so again ..patience and CW!!!

AJ8B: You are a veteran of many DXPeditions. Is there one that really stands out and why?

EI8IU: I am a member of the EI DX Group but have not been on any of the DXPeditions, I always managed to find an excuse not to go.. I'm not expecting that to change...

AJ8B: We have several hams with 160M DXCC and several (like myself) who are actively pursuing it. Any hints or secrets to Top Band?

EI8IU: I spent a lot of time trying to get my DXCC on top band which I finally got last year, what I done was got up during the night for all the big contests and simply pick and work the ones I needed, FT8 also helped a bit.

AJ8B: Do you contest and if so, What is your favorite contest?

EI8IU: I do contest although I wouldn't call myself a Contester, I do a lot of the local EI contests and enjoy the IOTA and CQWW contests, have done several SSB and RTTY CQWWs, I find the CQWW CW tough going and really don't the time to motivate myself to do it.

AJ8B: Any QSLing hints?

EI8IU: I love QSLing, LOTW is great for DXCC. I am the EI QSL manager for the 8s as I still love to receive paper QSLs. Have also spent a fortune QSLing direct (quiet a few for top

band) most of which were successful. I use EQSL also.

AJ8B: What coaching/advice would you give new amateurs?

EI8IU: We have several new amateurs in our club, most of which I knew before they were licensed, start of simply, and DON'T be afraid to ask a question no matter what it is, and enjoy the hobby, because that is what it is...a hobby, not worth getting stressed if you cant work a station, you'll get him in the future etc.

AJ8B: What is it like in your part of Ireland? Your QRZ.com page really paints a beautiful picture.

EI8IU: I live in Leitrim, a small rural county in the North West of Ireland, on top of a hill but surrounded by higher hills so VHF is interesting. Nearest neighbor is about 100 meters away, can't see his house from mine. We might see maybe 10 or so vehicles pass by on a busy day! Great views to the south but also very windy as we have no shelter up here. Although there is lots of forestry around, I have no trees that I can use for antennas, I should have planted a few when we built the house! I grew up here and love it, even though the wx is not wonderful, broadband not good either I will never move again!

AJ8B: What licensing levels do you have in Ireland ?

EI8IU: We have really one level as such, you get a three-letter suffix ending in B if you don't do the CW test but have the same privileges as someone who does the CW exam. If you do the CW exam you get a two-letter suffix.

(cont. on next page)

Interview with Brian, EI8IU (cont.)

AJ8B: If I were to stop by for a visit, what site(s) would you want us to visit?

EI8IU: If you stopped by what should you see....there are so many things to see within a two-hour drive (this would bring you to most places except Cork in the south) I would recommend staying for at least a couple of weeks. First thing would be to drive The Wild Atlantic Way.. Look it up.

AJ8B: What local food would you want me to try?

EI8IU: There are some specialties in most parts of EI, here it would be Boxty which is made from grated potatoes and flour and a bit of magic. Also, poitin which is similar to moonshine. Great stuff if you can find it.

EI8IU: I had the great pleasure over last weekend in (along with some of our club members) in assisting with an ARISS school contact with the International Space Station. The eight-minute contact took place between ten pupils from a school in the midlands (Athlone, which is an hour from me) at 14:45 on Monday last and was streamed live on YouTube. It got great publicity here and made the main evening news. It done more for the hobby than anything over the last number of years. They were talking to the astronaut Shannon Walker. It was a great success. Unfortunately, I don't have any photos but I am on the YouTube video sitting on the left side of the control desk. Due to the Covid restrictions it was a bit muted on the day as only a limited number of people could attend but the publicity was really phenomenal.

<https://www.irishtimes.com/news/science/space/irish-students-hook-up-with-international-space-station-1.4430193>

<https://www.youtube.com/watch?v=x7ZmWjQWq3U> (or google Athlone school ISS Youtube)

<https://www.youtube.com/channel/UCLbS7YwrXtc9QJeDU8UU> Fw/about

The first clip is from the news, the second is what was streamed live Bill.

That's it Bill, I hope it makes enjoyable reading. You take care, and have a peaceful Christmas.

Very best 73 de EI8IU Brian.



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2021 Goals for DX

This edition's question for our esteemed DXers was "Do you have any Harm Radio goals for 2021? This would include new equipment, antennas, modes, award chasing, etc. Many of them responded..enjoy...

I had (have had) plans for contest expeditions to Madeira (ARRL DX), Albania (WPX) and Mongolia (IARU HST World Championship) but Covid makes it very unlikely to happen. This year I bought a new K3s Elecraft and sold my older K3 (12 years old), so now the radio is up-to-date for CW.

Next year I want to mount an antenna for 160m in the local club. The club is placed in Aabenraa about 20km south of me and about 20km north of the German border.

I do not have any possibility to put up an antenna at home, so the club is my place to be on the air. The club you find at <https://oz6arc.dk/> - in Danish.

If I succeed with some activations I will let you know. Have a merry Christmas and a happy new year to come.



Vy 73 de **OZ2I Henning**

The only goals set for 2021 is to improve on the 70 cm EME side with 2 new antennas and try to stay alive to see 2021 lol.

Regards **Chris 9Y4D**

I usually don't have any goals or promises for next year. The most important thing is health, without it, I can be so active and feeling bad not help me to stay by the radio.

For 2020 I was reaching 60 000 QSOs and if I will manage to do that in 2021 will be fine. As every year I still running the WPX awards, US Counties. Trying to do my best in some contests and be active as much is possible on the bands. I don't expect many new ones on band slots since I already have quite high numbers there.

Since there is Corona, no DXpeditions so no many chances to work something new. Health is most important and I'll be active if all will be fine.

Best of luck and Season Greetings to readers.

Janez S51DX

(cont. on next page)

2021 Goals (cont.)

My actual project is building a 3-meter mesh dish antenna for QO-100 DATV which is already under construction.

The next project is putting back my mast which has been completely overhauled and my 2 el 6m Cubical Quad antenna on top, I want to try the magic band.

A possible project for 2021 would be building an HF/50mhz 1K amplifier, I already built a 1k 2m EME PA so it will be a new challenge.

We expect to make field days more often now that we have a good team on board. Francois 3B8BAM, Ujo 3B8BAL, Dev 3B8BBB and myself 3B8FA.

You can have more info about 3B8 hams in general there

<https://groups.google.com/g/3b8land>

<https://mars3b8.wordpress>

Wish you and yours a nice end of the year.

73s

Pat 3B8FA

(cont. on next page)



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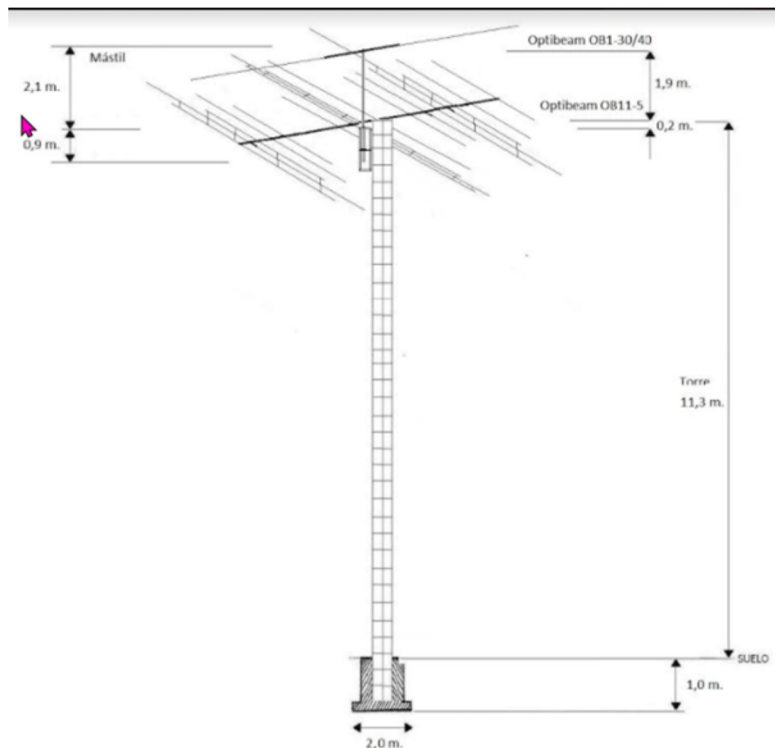
2021 Goals (cont.)

Dear Bill,

Yes, We are very excited because I am working in my new QTH Station... I attach a picture where you can see my 2021 Project... It is a tower with a Lift because Menorca Island is very windy (sometimes more than 100 Kmh)

Best Regards

Jose **EC6DX**



I am planning to put up a antenna called a ZS6BKW based on a G5RV that can cover 80m to 10m in 2021. The antenna I am currently using covers 40m to 10m up at 35 feet. When it comes to HF radios this one I have has got to keep working as Hf radios are too expensive! You can look at my qrz page.

The only new item I acquired this year is called a network switch box for operating SSB and digital so I can switch between different operating mics or devices. I have attached a photo.

The item works for me because I only have 1 HF radio and it makes it easier for me because of my disability having the use of one hand that's fully operational.

This is what im talking about it has 4 inputs and one output to the HF radio. The back of this box has 4 x rj45 connectors and 1 to your radio. Cable supplied
The other inputs are for MIC, Heil Headset and Digital Interface. I switch between those 3 2 for SSB and 1 for digital. Works great

Otherwise nothing to really complain about

73 enjoy your evening (My new morning) Have a Blessed week

DeTheunis **ZS2EC**

(cont. on next page)



2021 Goals (cont.)

Yes, I hope that in second part of 2021 the restricting measures due COVID - 19 will be finish (stop) and E6AM & A35GC DXpedition to take place in October 2021. I am also working very hard about other my DXpeditions projects.

Since August, 1 / 2021 I will be retired (after 41 years work) and I will have enough time to organize 2-3 different DXpeditions per a year.

I already received VU3FZE callsign (since November 2020) as first step of obtaining of VU4GC & VU7GC license.

I am thinking very seriously about VU4GC & VU7GC DXpedition, a few months (3 - 4 months) after the final of COVID- 19 restricting measures. I am very thankful of Deepak, VU2CDP for his help about obtaining of the VU3FZE license and about this that he promised me to help me also for VU4GC and VU7GC licenses!

In the next a few years, I have plans also to activate following interesting DX countries as: T31, T33, E51 / N (North Cook), FO/A & FO/M and some other.

At the same time, I am working on some improvements to the antennas and equipment, which I use during my expeditions. For example - together with my friends Krasi, LZ1ZD and Ivan, LZ1PM, who are members of LZ9W, we are working on the construction of receiving antennas and better bypass filters, that I will use during my future expeditions.

The most important is that I am in a good health condition with a strong immune system!

Stan, LZ1GC



The 2021 CW/SSB Ultra-Marathon—Pete, MM0TWX

I sent this out via email and it generated a lot of chatter. Let me know if you are going to participate and I will track the “standings” in the newsletter.

We want to wholeheartedly thank all those who have pre-registered for the 2021 Ultra-Marathon “Bands Alive” organized by the True Blue DXers Club.

The level of interest and enthusiasm for this initiative is very high – so many have written saying that they find the format exciting and they cannot wait for the start of the operations on January 1st, 2021. Also, the Sun seems to be gracing us with a very good start of cycle 25, and this bodes extremely well for good levels of activity next year.

Although having very nearly 300 people already pre-registered for this event is a major success, we think we all can do even better! I would like to appeal again to all of you to do what you can to raise the profile of this event even further.

Talk to your friends, talk to your local Club, write to the DX editor of your national Ham Radio magazine, write a post on a discussion forum – any of these simple actions can result in more people participating. And remember: more people = more fun = bands more alive than ever! All you have to do is to point people to www.tbdx.net/marathon where they will

find all the information they need.

I also wanted to give you feedback on a promise I had made. I did indeed contact about a dozen manufacturers of radio-related products and accessories, asking for a sponsorship, in the form of a product or a discount voucher, for a prize to go to the winners of the CW and SSB categories. 9 of these had the courtesy of replying,

wishing us luck with the initiative, but saying that – owing to the difficult economic situation – they cannot afford a sponsorship at the moment. At least they responded, which I really appreciated and is more than many would have done...I still hope to be able to motivate potential sponsors to contribute next year, especially if we can show participation numbers in the high hundreds.

Meanwhile, everybody please stay safe, enjoy DXing and stay tuned for the next and last Marathon update before we actually begin. And don't forget to do your part for promotion!



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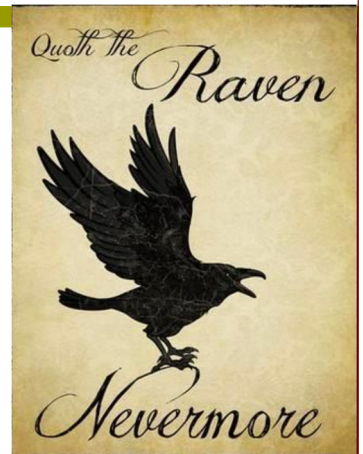
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The Raven

By Edgar Allan Slough—K4ZLE

*This appeared in The DX Magazine in the September / October 2009 edition
and is reprinted with Jay's permission.*



Once upon a midnight dreary,
while I listened, weak and weary,
tuning many a signal, dreaming of contacts from days of yore.
While I nodded, nearly napping,
suddenly there came a tapping,
as of someone gently rapping, rapping
"CQ" above the threshold floor.

"Tis some JA," I muttered, "tapping, barely audible above the threshold floor—
only this and nothing more."

Ah, distinctly I remember.
It was in the bleak December,
and his fist, it was so limber,
as he pounded on his sender.

Eagerly I strained to hear him -
tuning, trying just to clear him
from the other signals oh so near him - thinking,

"Who is this fellow
with a CQ that is just so mellow?
And why is my brain like Jell-o
as I seek a 'hello' from someone I've never met before?"

Deep into that darkness hearing,
long I sat there wondering, fearing,
doubting, dreaming dreams no ham ever dared dream before.

(Continued on Next Page)

The Raven (cont.)

But the silence, it was broken
as the ether gave a token,
And the only word there was spoken
was the melodic sounds of the code unbroken.
Except from the periodic "QRL" from some W4.
Still I thought, "Tis some JA and nothing more."

Startled by the stillness broken,
by his ending that was spoken,
"What!" said I, "There's a country I've not worked before!"
Caught up in the excitement growing.
How many heard him, still not knowing.
I could feel my heart pump faster
as I struggled with the master,
but soon I had the linear glowing -
I wish I'd had it on before.
I kept hope that I would grab him.
Yes, I really wanted to nab him,
before the pileup began to roar.

My practiced fingers fumbled,
still the letters tumbled,
And from my keyer rumbled -
my call to the heavens bore.

Such excitement! Such elation!
How could I dare hope to work this station?
But as I listened ever intently, back he came, so very gently:
"K4ZLE—4 4."

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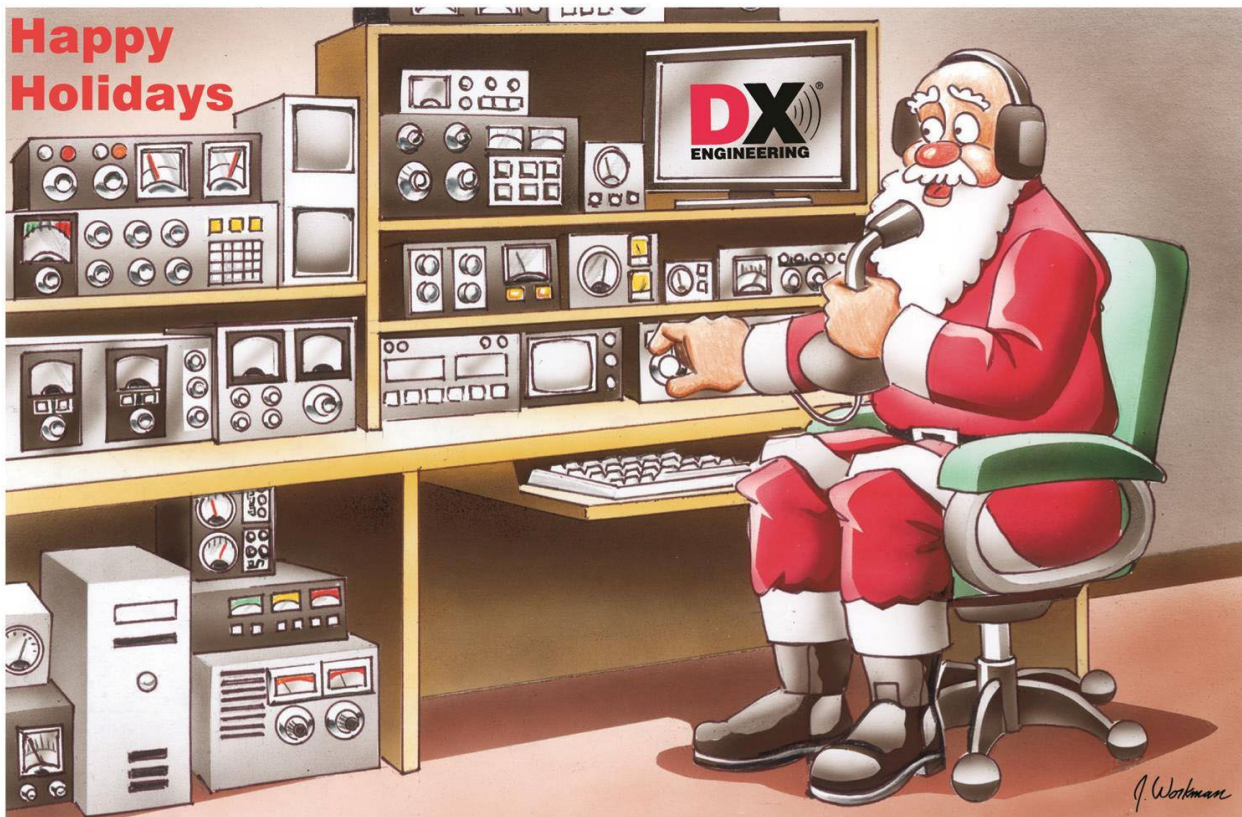
The Raven (cont.)

As I jumped and shouted,
I wondered why I doubted,
but those banal thoughts soon were routed
as I heard the earphones roar.
Ever growing, never slowing,
vainly knowing, but ever hoping
they would break through the bedlam core.
Yes, it was a cold December
and how clearly I remember:
The pileup doesn't hinder
IF you are first to be the sender
and you will have him in the log -

forevermore!

¹WithapologiestoEdgarAllanPoe! IntheU.S.AirForceanElectronicWarfareOfficerisknownasaRaven. Although the author proudly wore Marine Corps green and not Air Force blue, he attended the Air Force Electronic Warfare School and is a certified ravin' Raven, forevermore!

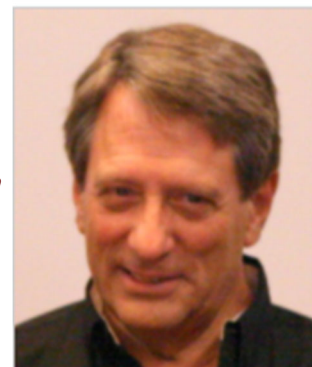
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Why We CW?

By Rob Brownstein, K6RB

Reprinted with permission of the Author. This originally appeared in the December 2020 edition of "Solid Copy" - the newsletter for the CWOPS organization. Many of our DX club members are also CWOPS members. You can contact K4ZLE, N8AA, or me for more information about CWOPS. I know you will enjoy.



After more than 62 years of hamming – mostly CW – and seeing recent articles that predict a ham radio future that is largely digital and EMCOMM oriented, I feel compelled to weigh in. These days I frequently work people who were born years after I started pounding brass. Their frames of reference are certainly going to be different than mine. Their experiences on the bands, using different modes, are also going to be different. So, risking being called “an old fuddy duddy,” I want to make my case for why we do what we do, and why I don’t think we will end up in history’s dustbin anytime soon.

Each of us began our radio sojourn at different times and under different circumstances. Just read through those capsule histories each month in Solid Copy. Yet, here we are, in 2020, carrying on with Morse-encoded and decoded CW signals, just like I did starting in June 1958. Surely many things have changed since 1958. I haven’t read a paper newspaper in probably ten years. I haven’t watched a network TV show in probably 30 years. And, I stopped reading paper books a few years ago and now read most everything on an iPhone or iPad. If you would have told me, in 1978, that I would be doing all these changes, I would have questioned what you are smoking or drinking. Yet here I am.

But, despite all these changes, I still get on the air, with a radio capable of send-

ing and receiving CW signals, connected to an antenna, and engage in two-way exchanges with other people doing the same thing. Before I get to why I do so, let’s look at a capsule history of how we got where we are.

Some history

I’m not going to bore you with names and dates. Suffice it to say that near the end of the 19th century, we found that we could send encoded signals, wirelessly, to other places on the planet. Those first signals, by the way, were not the familiar tones we now hear. They were the familiar clicks that wired-telegraph telegraphers were used to hearing. A device called a “coherer” would, in the presence of an electromagnetic wave, change from high to low resistance, temporarily, and allow a current to close an electromagnet producing a “click.” It was very similar to the good old telegraph system except instead of wires; it used “radio”

(Continued on Next Page)



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Scott Neader KA9FOX

Why We CW? (cont.)

Some history

I'm not going to bore you with names and dates. Suffice it to say that near the end of the 19th century, we found that we could send encoded signals, wirelessly, to other places on the planet. Those first signals, by the way, were not the familiar tones we now hear. They were the familiar clicks that wired-telegraph telegraphers were used to hearing. A device called a "coherer" would, in the presence of an electromagnetic wave, change from high to low resistance, temporarily, and allow a current to close an electromagnet producing a "click." It was very similar to the good old telegraph system except instead of wires; it used "radio" waves to make those clicks. And, instead of just one receiving operator hearing those clicks, many operators could hear those clicks at the same time.

Wireless telegraphy was not focused on terrestrial applications. Wired-telegraphy already had that covered. Instead, it was focused on ship-to-shore, and ship-to-ship communications applications. Before radio, when a ship left port, and was no longer visible, it was incommunicado until it was sighted nearing another port. If it sank, no one knew unless survivors later were rescued and gave a recount of what happened. With wireless telegraphy, a ship could stay in communication even when it was no longer visible.

In the early 20th century, a UK inventor invented the first vacuum tube (a rectifier)

called a "valve." It was a diode that allowed current to flow in one direction only. Soon after a third electrode was added, and the device could now "enlarge" a current's amplitude while pre-

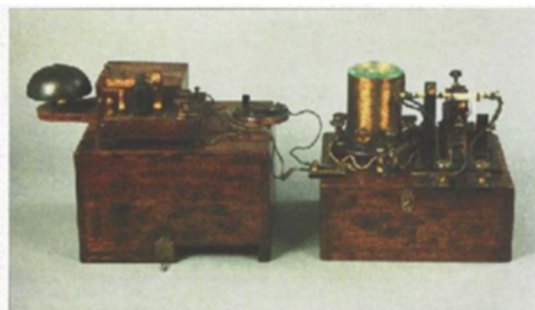
serving its time-varying characteristics. Like a photographic enlarger, this amplifier simply made the input signal larger but its "image" stayed the same.

Once we had diodes and amplifiers, it was possible now to dispense with

broadband spark transmitters and coherers and replace them with electronic oscillator/transmitters and receivers. That's when the familiar tones came into existence.

Like the wired-telegraph operators before them, wireless telegraph operators used hand keys to encode the CW signal. A manual key, as such, has an inherent limit to how quickly it can be keyed which in turn establishes a limit to how fast a message can be encoded and sent. The invention of the semi-automatic "bug" key helped to reduce fatigue and increase speed. Later, the invention of a fully automatic keyer further reduced fatigue and increased speed.

If you were to listen to a recording of a conversational QSO done in 1960 using tube-type gear and a keyer and compare it to the sound of a contemporary QSO using solid-state gear and keyer, you would hear very little difference. Thus, for at least 60 years, from a sound impression perspective, not much has changed.



Marconi's wireless receiver, built in 1895.

Source: The Guglielmo Marconi Foundation: Historical Museum

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Why We CW? (cont.)

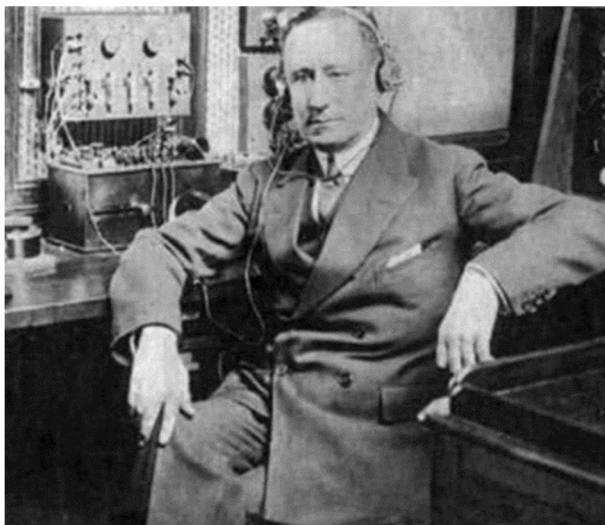
What has changed, though, is the environment in which these CW signals are now sent compared to those sent in 1960. Our current environment is much noisier, electrically speaking, than that of 1960. And alternative means of communications abound compared with back then. In 1960, if I wanted to speak to my friend on the other side of town, my choices were to get on my bike and ride over to his house, or pick up my telephone, dial his number, and talk to him. If speed was of no consequence, I could drop him a letter or postcard. Today, I can email him, TXT him, do an audio/video call using Skype or WhatsApp. And here's the best part, whether he is two miles away or 12,000 miles away, I can still do all of those same things.

So, why in the world would I want to acquire ham radio gear, put up an antenna, and attempt to communicate using Morse-encoded/decoded CW signals?

Some perspective

Going back say 200 hundred years, during a person's lifetime, not much had changed. You communicated locally by visiting someone, and you communicated over distance by writing a letter and mailing it. Most communication in those days, other than newspapers and town-hall meetings, were one-to-one, point-to-point communications.

With the advent of the telephone, that changed. If you could afford one, you could now talk, one-to-one with someone (if they had a phone) over a respectable distance. If they had no phone, though, you were stuck with traveling or writing a letter.



In the early 20th century, though, radio provided a means for one-to-many communications over large distances. At first there was a bit of chaos as radio was unregulated and hobbyists (hams) and commercial entities were contending for spectrum. The Federal

Radio Commission (FRC), later superseded by the Federal Communications Commission (FCC) imposed regulation over who could transmit wireless signals, and what frequency or frequency band they would have to use.

It didn't take long for commercial radio networks to emerge and by the 1920s, radio programming in first-world countries was well at hand. In the 1930s, prior to World War II, radio was used to great effect by Churchill, Mussolini, Roosevelt and Hitler. Never before had a leader of a country had a means of communicating with huge groups of countrymen.

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Why We CW? (cont.)

Meanwhile, the hobbyists (hams) who were given harmonically related spectra to play with first relied on Morse-coded CW signals and then began adopting voice-modulated techniques. The ham radio I encountered in 1958 had a lot of both – hams operating CW and hams operating AM phone. Because AM phone took up a lot more bandwidth than CW, the FCC and other IARU entities typically gave wider swaths of bandwidth to AM users than to CW users.

By the 1950s, some ham-radio use patterns began to emerge. CW operators and AM operators mostly engaged in two-way conversational activity but periodically events took place whereby participants competed to see how many quick-exchange QSOs could be made within a set period of time. The other big activity was trying to work as many hams in as many different countries as one could. The ARRL's DXCC awards were highly coveted.

From the 1950s until the mid-1960s, CW and AM were the primary modes although beginning in the early 1960s, suppressed-carrier single-sideband (SSB) transmissions began to grow. They had the advantage of higher power efficiency than AM and better spectrum efficiency, too. Furthermore, the problem of carrier interference from close-by AM stations was no longer an issue as the carrier was suppressed, not transmitted.

With increasing interest in SSB mode, and with the ability to use the same sub-systems for both transmitting and receiving, there was a surge in development of so-called “transceivers” where instead of using separate transmitter and receiver, one could use a single device for both.

At first, transceivers were relatively expensive. But, with Heathkit's SB and HW series gear, prices became much more palatable, and many more hams began trading in their separates and switching to transceivers.

Virtually all of these transceivers had both CW and SSB mode capability, but the popularity of SSB for DXing saw most mode switches sitting in the SSB position. Prior to the explosion of lower-cost transceivers, most European amateurs used CW mode because AM modulation was expensive and power inefficient. But once they had access to lower-cost US and Japanese gear, one saw a shift of European DX activity to SSB from CW, or, at least, equal measures of both.

During this same period, the VHF and UHF bands, which had hardly been used also saw a surge in activity. On 2 meters, in particular, solid-state hand-held devices became a popular means for communicating locally by making use of a centrally located “repeater” that would receive and then retransmit a 2m FM signal. Coupled with increasing use of antenna-restricting HOA/CC&Rs in new housing in the US, people who may have been inclined to buy AM/CW gear and put up antennas often moved on to other things or bought 2 meter HTs and became the so-called “shackon-a-belt” new hams.

Bringing us back to now

There's no question that ham radio is ageing. The average age of hams has increased inexorably since 1970. Those who see doom-and-gloom assume that as our generation moves on to that big ham shack in the sky, HF CW will become a footnote in a history book. And they may be right. But I'm not so sure.

(Continued on Next Page)

Why We CW? (cont.)

First let me point out that in the late 19th century, with the shift from sailing vessels to steam-engine vessels, people said sailing and sailboats would become historical artifacts. Consider this, though, today there are more boats with sails than ever before in our history. Today there are more people who know how to sail than there were 50 years ago.

In the mid-19th century virtually every item shipped across an ocean came by sailing vessel. Today, virtually no items are shipped by sailing vessel. Their use in commercial shipping is essentially zero. Yet, there are millions of sailboats and sailors. Why? Because it's a skill that is challenging to learn and enjoyable to practice. Hold that thought.

Ham radio was never a primary means of communications. It was always a hobby. It began with CW, then added AM phone, then added SSB phone, then added computer-generated digital modes. Although SSB activity appears to be waning and digital activity is swelling, CW activity seems to be holding steady or growing. This is particularly true for radio sport. When I sit down at my paddle, or bug, or J-38, I don't chide myself for doing something that is an anachronism in today's world of global, hand-held communications capabilities. I don't weigh what it costs me to do a CW chat with some guy in Tokyo versus calling him on Skype or texting him. Of course, it's faster, easier, and more reliable for me to Skype or text him than to try working him with CW with QSB, QRM and QRN. So, why do I do it? Because acquiring the CW skills is a challenge and enjoyable to practice. Sound familiar?

More perspective

Except for Covid-19, there are still a lot of people that like to go ballroom dancing. There are people who like to ride horses. There are folks who go backpacking. Like those activities, to many people HF CW ham radio is just plain fun. Yes, you do have to work to acquire those skills, but once acquired, you can sit back and enjoy chatting, contesting or chasing DX with your fingers.

Finally, one of the more recent ham-radio activities is Summits on the Air (SOTA), where people climb to the peak of a mountain, set up a portable antenna, and take out a small transceiver and proceed to work a bunch of people. Some of those people who climb or are worked are interested in collecting summits. Some of them just blunder into the mix and add a QSO. What a great way to combine the fun of exercise, being in the outdoors, and ham radio. But don't try that with digital because it means carrying a computer up there with you. And don't try that with SSB because, pound-for-pound, with the low power and greater bandwidth, the signal-to-noise ratio may limit how many QSOs you'll have. After nearly 10 years of advising CW Academy groups, my subjective finding is that at least 25 percent of the more than 200 students I've worked with came to CW by virtue of SOTA. My feeling is that when younger folks see the fun you can have using CW for SOTA, or radio sport, or just chatting (like texting), there will be some who will rise to the challenge of learning Morse and getting on the air. There may never be as many young hams as there were in my novice days of 1958, but I wouldn't bet that HF CW will simply shrink to nothingness over time.

K6RB—Rob



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Interview with Andy—DL8LAS

DL8LAS was my first German QSO on 160M. As soon as I visited his QRZ.com page, I knew he would be of interest to the club. THEN I learned he had one of our DXPedition of the Year Plaques on his wall! You can contact Andy at DL8LAS@aol.com



AJ8B: How did you first get interested in amateur radio?

DL8LAS: My first interest in amateur radio was 1979 licensed since 1980.

AJ8B: Do you have a favorite band or mode?

DL8LAS: Yes, my favorite band is 160m top-band, mode CW

AJ8B: What time of day and days do you like to operate?

DL8LAS: 7 day per week about 2-4 hours, without contest, if contest than much more :)

AJ8B: Any secrets to your success?

DL8LAS: Be ambitious, always test new things, never be satisfied with the current state

AJ8B: Any tips that you can share?

DL8LAS: Just try out new ideas, look for tips on the internet, just ask other experienced oms

AJ8B: Describe what you are currently using:

DL8LAS: My station? Now my setup is :
 FTDX101dx from Yaesu, a very nice TRX
 PA: OM power, ACOM 2000A
 Ant: 160m T- antenna,
 80m Dipole 20m high,
 10-40 Optibeam OB12-6
 RX Antennas: 7 different beverages to all
 directions for topband

AJ8B: What advice do you have for those of us trying to break pileups to work DX?

DL8LAS: Listen, listen, listen.... get an idea of how the DX station works, only calling if you copy the DX station clear. Please use discipline. On my DXPedition to VP6DX—Ducie, I heard so many bad callers without discipline. I don't answer "VP6DX de.....", the DX knows its own call sign!

AJ8B: You are a veteran of many DXPeditions. Is there one that really stands out and why?

DL8LAS: VP6DX Ducie Island, it was the best of my DXPeditions, very well organized, best operators from the world, and a new QSO record.

AJ8B: What was the worst experience you had?

DL8LAS: I had a tower crash this year, my steel rope broke and the tower collapsed

AJ8B: Where are you going next?

DL8LAS: No plan so far, because covid-19

(cont. on next page)

DL8LAS Interview (cont.)

AJ8B: You were on the ZL8X Kermadec DXPedition that earned the DXPedition of the Year from SWODXA. What did that mean to you and the group?

DL8LAS: The ZL8X team were very happy to earn this nice honor, it was much work on this Island, but at the end was it worth

AJ8B: You mentioned the DR5X contest station. Can you tell me about that?

DL8LAS: DR5X is a small contest station at my home QTH. I operate here with my good friend Holger, DL9EE for some contests. Especially on 160m the station works very well. I am also Contest OP at DR1A, DR4A, LX7I, DL0CS, DA0HQ, DF0HQ

AJ8B: What is your favorite contest?

DL8LAS: CQWW 160m, WAG, EUHF Championship

AJ8B: You have an amazing array of receiving antennas. What has worked best for you?

DL8LAS: All RX antennas works well, every day on topband another ant is better :) My favourite is the end-fire array, it is very quiet and mostly the best to NA

AJ8B: Any QSLing hints?

DL8LAS: I use all, eQSL, LoTW and the bureau

AJ8B: What coaching/advice would you give new amateurs?

DL8LAS: As a newcomer, I learned a lot by watching and listening. I have always asked older OM's for help to give me tips.

AJ8B: If I stopped by, what local food would you want me to try?

DL8LAS: I am from the Baltic sea and here local food is fresh fish from the sea. I prefer Kabeljau Filet with Dijon-mustard sauce.... and a good German white wine such as Grauburgunder.

AJ8B: I really hope that our members stop by to check out

your qrz.com page, your website, and view the drone footage. Thanks for taking the time to answer my questions. Is there anything you would like to share with us?

DL8LAS: How about this picture?



Make sure you check out the websites that Andy lists as well as his QRZ.com web page with some great Drone footage.

www.dl8las.com
www.swing-company-bigband.de/
www.uni-big-band-kiel.de/

Protecting Your Shack Station PC is More Complex than Ever

by AJ8B—Bill.

This article originally appeared in the Sept-Oct edition of the National Contest Journal and is reprinted here with their permission.

Imagine this situation: You are at the contest station of Dave, K8DV. Jay, K4ZLE finishes working the last multiplier needed. Tom, NR8Z announces that we have an all-time new score in excess of 9 million points for the 8th call area in the CQ Worldwide CW. The team stands together, just taking a deep breath wondering if it will be enough. Suddenly, Chuck, K8CR, asks me what a bitcoin is. Being an IT guy, I freeze in my tracks before asking, "Why?" Chuck says that he tried to copy the logbook database to a thumb drive, and when he selected it, he received a



strange window (see Below).

Now we have a real problem. We can pay the requested \$300 to get our files unencrypted (if we pay within an hour and 20 minutes) or we don't pay and lose the weekend's record-breaking work. Other than the extortion issue, \$300 may be worth it. But what if it were \$3,000? In fact, in 2019, the average ransomware charge was \$84,116!

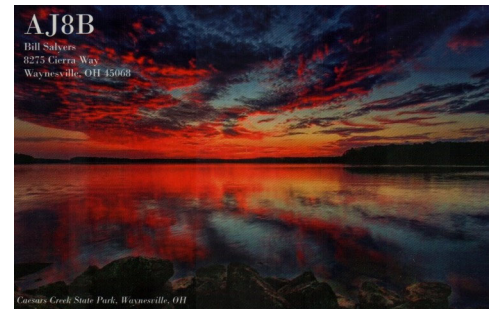
This is

a worst-case scenario, but it is very plausible. There are also denial of service (DoS) attacks, phishing and spear phishing attacks, drive-by attacks, password attacks, and more. You may think that this is just a Windows issue, but, in February, **vox.com** released a report stating, "The amount of malware on Macs is outpacing PCs for the first time ever, and your complacency could be your worst enemy."¹

Linux/UNIX is certainly a better platform to minimize virus activity, but I can remember a couple of sleepless weekends at GE Aircraft cleaning up workstations after we were hit with the Morris Worm.

There are two types of questions that I hear all the time. The first set is about the need to stay prepared. I hear questions like "Who would target us?" "I am just a single user," or "We are a small company." The reality is that most of the successful attacks did not directly target the victim. The villain throws a wide net hoping to catch *anyone*. The second set of questions is that these attacks are put together by someone with extensive resources and lots of money. Successful attacks have been launched against companies and individuals from a coffee shop using little more than an internet connection and Facebook. Cisco produced an excellent video a few years ago that I still use as a teaching tool². It recounts a *true* story about a company about to go public. This attack eventually forced the CEO to resign and cost the company millions of dollars.

(cont. on next page)



PC Protection? (cont.)

Needed Concepts

We need to discuss a couple of computer concepts so that we can understand the remedies. I will keep the discussion very general; entire books have been written about them and I don't want to bore you with unnecessary details.

The first is Domain Name Services (DNS) — the phone book of the internet. Imagine that instead of www.aj8b.com, I told you to view my website at an IP (Internet Protocol) address of 50.28.8.76. And then later, due to expansion, cost, or a host of other issues, I decided to move to a different hosting company. Now my address is 23.235.203.61. A system was developed to provide the appropriate address when asked for the IP Address of a website. Upon the query, a DNS server will respond with the current IP address of the particular domain in question. A vast majority of attacks use invalid or redirected IP addresses to cause havoc for the local PC or on the network.

The next concept is PC operating system access levels. Many hams use the PC right “out of the box” and don't set up any sort of user access level. Windows typically allows for two different types of users; local users and administrative (admin) users. Local users can execute programs that use local resources, such as web browsing, office applications, and logbooks. If local users attempt to change a system setting, such as deleting a disk drive, they would not be able to do that as they are only local users. However, an admin level user can do anything. If you use the computer out of the box, then you are probably running with admin access right now.

It is important to understand that when a user executes a program, that program inherits the access and permissions of the person who executed it. If you are erroneously attempting to

run a program that would unknowingly execute a phishing attack for instance, it may fail if you are just a local user, but it would succeed if you were the admin, or had admin level access associated with your account. You don't have to log in as administrator to have admin privileges. If the person who set up the computer created an account, they can associate a level of privilege with an account. For instance, a log-in account of AJ8B could be either a local user or an admin level user, depending upon the setup.

Finally, it is important to have some idea as to how computer programs execute in a Windows environment. When you double click on an application — let's say *AJ8B Cool Logger* as an example — that application is loaded from the hard drive into RAM, and resources are lined up in a specific order, with specific links and interfaces set aside for that application. Windows will determine how much memory, I/O, and other resources it will allocate. Once *AJ8B Cool Logger* is loaded into RAM and the resources are connected to it, the program is off and running. The danger is that *AJ8B Cool Logger* may not be the application you expected. For instance, if you downloaded or were sent a compromised copy of the software, all may seem just fine. When you run it, however, strange things may happen, as the “bad” code is now attempting to do what it wants.

Many applications are compromised, and you won't know it even after you have started to run them. For instance, in our example, perhaps *AJ8B Cool Logger* is doing what it was expected to do. It may, however, spawn a task that would search for credit card information, login and passwords, or bank info. You would not, and may never, realize that you have been compromised, as all appears great.

(cont. on next page)

PC Protection? (cont.)

In the 1990s, a popular “word processor” also contained a keylogger that would capture login and password information and then pass it along to its nefarious creator. It all makes you want to go back to paper logging, doesn’t it?

A Layered Approach

So how can you address all of this? It would seem like a lot to worry about with the complexity of operating systems, networking, and the internet. *MalwareFox*³ has a model that we have modified to identify the threat level and the corresponding approach to mitigate the threat. You must think of this as a holistic approach. I like to describe the problem as a one-story building shaped like the Pentagon. You may have all of the doors fully monitored and protected, and all but one window covered. Eventually, someone will find that “open” window.

Although this may seem like a commercial for these products, it is intended to show the layered approach and the reason *why* we chose a product. We could have hours of discussion about which approach and mix of products are the best and there are probably hundreds of combinations. However, the layered groups of products discussed here have successfully protected our 500+ PCs, servers, portable devices, and mobile devices, and I am passing along what has worked for us.^{6,7}

If the data we want to protect is at the center, or the target, we have wrapped layers of protection around the data³ (see Figure 2).

φ Operating System Level

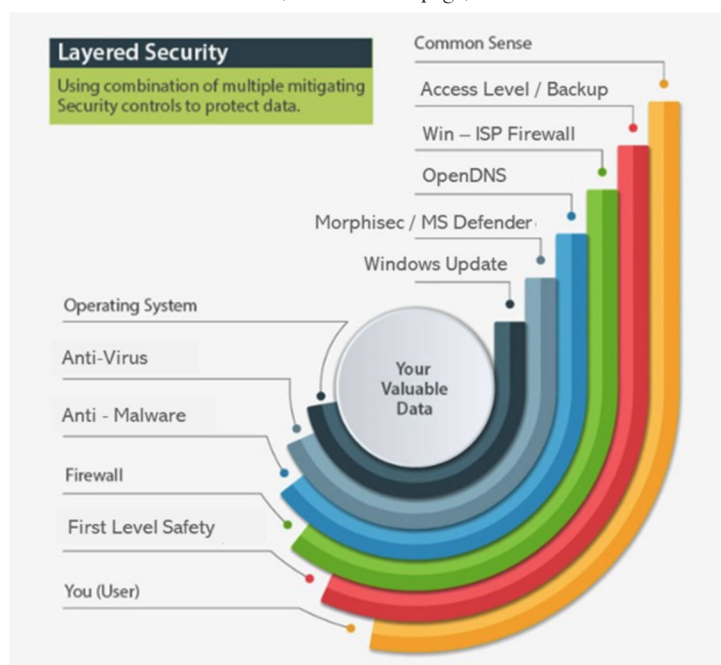
Whether your operating system is Windows, Mac OS X, Unix, Raspbian, Ubuntu, or other, it should be up to date. Our entire approach assumes that you are using the latest and greatest. Older versions of these operating systems

may work just fine, but if you are concerned about threats, then it is time to upgrade. Make sure that you are receiving the patch bundles and upgrades for your operating system *and* for your applications.

φ Anti-Virus Level — For many years, Microsoft Windows *Defender* was little more than a “me too” addition to Win XP and Windows 7. However, Microsoft committed resources to bring Windows *Defender* on par with the best out there, and have included it, and the regular virus definition files, free of charge as part of the Windows 10 operating system. *PCWorld* reviewed *Defender* in July 2019. It said, “Multiple test results make the case that Windows *Defender* is good enough to protect your PC from viruses and malware.”^{4,5}

One of our two “silver bullets” is a product called *Morphisec*.⁷ This Israeli-based company has developed an approach that allows Windows programs to start up while monitoring to compare their behavior to the typical Windows program start-up behavior.

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PC Protection? (cont.)

Remember our discussion about Windows tracking resource requests and then allocating PC resources? “*Morphisec* has a way to “morph” or “scramble”, the process structure relocating and transforming libraries, functions, variables and other data segments in a controlled manner. Each run is unique, per process instance, making the memory constantly unpredictable to attackers. Applications continue to load and run as usual. A lightweight skeleton of the original structure is left as a trap.” This is all the explanation they will give, but I can testify that it works, and it works well.

The real benefit to *Morphisec* is prevention of Zero Day attacks. You can make sure that your anti-virus definition files are up to date, and the operating system and applications are patched, but what if you are among the first users to get the “new” virus? There is no protection yet. The historical approach was to hope someone else was infected and then download the necessary files from the anti-virus companies *when they were available*. *Morphisec* will catch the Zero Day attack as it starts to run. There are no files to keep current. *Morphisec* monitors the execution of the program to determine if something is wrong. It is by far the best \$24/user/year we spend. This is a revolutionary approach to protecting PCs, and it really is effective.

ϕ **Anti-Malware Level** — Even though we are patched, have our virus definition files in place, and have other products working for us, users may still go to a website directly, or click a link in an email, that takes them to a site that may try to introduce a harmful app. What can be done about that? We use a product from Cisco called *OpenDNS* (now called *Cisco Umbrella*). This is our second silver bullet; it’s free for

home users and addresses the issues of internet browsing, both intentional and unintentional. Our discussion about DNS is useful now. I mentioned that there are DNS servers out on the internet, but I did not mention where. Cisco has worked with hundreds of companies to be their DNS provider. In fact, Cisco is now the largest DNS provider in the world, with a huge database of DNS requests and results. As soon as a link is flagged as being a problem (ransomware site, phishing site, etc.), it is recorded in the DNS database. If you are using *OpenDNS*, you will be alerted that the link you are trying to go to, *or some application (bot, rogue application, etc.) on your PC may be going to, is fraudulent, and the request will be denied*. Remember the key-logger application that had hijacked a word processor? *OpenDNS* would have flagged that key-logger application and blocked its ability to transfer the information it collected from your PC.

How large is the *OpenDNS* database? Cisco monitors 200 million internet requests *every day* from 100 million active users in 190 countries.⁹

ϕ **Firewall Level** — To be honest, I really don’t do much with this layer at home. I have found that the default settings of the Windows firewall per PC and the default settings that most ISP modems have in place are adequate. If you are hosting websites on your network, then you would more than likely need more than the PC and ISP would provide, and that is a discussion beyond the scope of this conversation.

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PC Protection? (cont.)

ϕ **First-Level Security** — There are two aspects of first-level security: Access level and file backup. As mentioned, the real issue with access level is that the program executing takes on the privileges of the person who started the program. If you are the admin (full rights), then the program will have full rights to do whatever it can. If you are a standard (local) user, then the program will behave with the rights of a standard user. You need admin access when you are doing such tasks as installing software, changing operating system settings, or deleting files and directories. You don't normally need admin access for day-to-day usage of your computer. So why take the chance? I recommend two accounts. The first is your day-to-day log in that has standard user privileges. The second account can be used to perform admin type duties. It is a basic safety procedure.

An earlier *NCJ* issue included an excellent article about backing up your files. In my case, I have a *Dropbox* directory set up, and all of my contest files are located in that directory. As soon as a file is saved, it is backed up to the *Dropbox* cloud.

ϕ **User Level** — As Voltaire said, “Common sense is not that common.” That is certainly true when it comes to using your computer. You might think that with all of the layers of protection that we have wrapped around your data, we would not need to talk about the safest way to use your computer. Not so.

For instance, the design division of one of the Big Three auto manufacturers was shut down for a week with a network “worm” that was doing nothing more than replicating itself to every other computer (Windows) and workstation (Unix) on the network — and then

starting the process over again. It was happening so many times that the network was swamped, and no one could get any work done. They eventually found that the worm was introduced by an e-cigarette charger plugged in to a USB port on a network PC. You never can tell.

Web browsing and handling email present many of the same dangers. Here are some things to watch out for.

- * If you don't recognize the sender's email address, and the subject is not something you would normally receive, be wary.
- * The sender's email address is from a suspicious domain, e.g., AJ8B@hoax.ru.
- * The email includes an embedded link or an attachment. The attachment is possibly a dangerous file type such as an .exe or .bat file.
- * The sender asks you to click on a link or open an attachment to avoid a negative consequence or to gain something of value.
- * You thought you were going to *NCJ*'s website but, although the URL is correct, the site I reached wants my credit card information.
- * The website you're using to troubleshoot a program wants to take control of your PC. Be very careful.

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PC Protection? (cont.)

Summary

By all accounts, cyberattacks in general and ransomware attacks in particular are going to keep increasing. According to the FBI, ransomware netted more than \$1 billion for criminals. If you follow the layered defense plan I described, or at least some of it, your chances of a cyber problem will greatly diminish. It is important to note that even with all of this in place, you may still have an issue. The more you have in place, though, the more you can mitigate the risk, and that is what this is all about.

Do you remember the scam in the 1990s about the Nigerian man with all those billions stored away and he just needed a few thousand dollars to get it out of the country? What if it *wasn't* a scam?

**NIGERIAN MAN DIES AND
AUTHORITIES FIND \$27 BILLION
IN HIS APARTMENT.**



**HE HAD BEEN TRYING TO GIVE IT
AWAY FOR 15 YEARS BUT NO
ONE WOULD RETURN HIS EMAILS.**

Notes

¹ www.vox.com/recode/2020/2/12/21134681/mac-pc-virus-malware-malwarebytes

² https://www.youtube.com/watch?app=desktop&v=yVZ8uga_1uU

³ www.malwarefox.com/layered-security/

⁴ www.malwarefox.com/is-windows-defender-enough/

⁵ www.pcworld.com/article/3434097/why-you-can-stop-paying-for-antivirus-software.html

⁶ www.microsoft.com/security/blog/2019/08/27/improve-security-simplify-operations-windows-defender-antivirus-morphisec/

⁷ <https://www.microsoft.com/security/blog/2019/08/27/improve-security-simplify-operations-windows-defender-antivirus-morphisec/>

⁸ www.morphisec.com/

⁹ umbrella.cisco.com/why-umbrella/interactive-intelligence



SouthWest Ohio DX Association (SWODXA)

Club Fact Sheet

Who We Are: *SWODXA* is comprised of active DX'ers and contesters with a deep passion for all aspects of Amateur Radio. We welcome everyone who is interested in joining our club to please contact us. *SWODXA* members are active in all facets of DX and Contesting. We also travel to, and fund various DXpeditions all over the world. *SWODXA* sponsors the annual DX Dinner held on the Friday evening of Hamvention weekend in Dayton, Ohio. In addition, *SWODXA* members moderate the Hamvention DX Forum. *SWODXA* is proud sponsor of the prestigious *DXpedition of the Year Award*.

DX Donation Policy: The policy supports major DXpeditions that meet our requirements for financial sponsorship. Details are available on the website at: <https://www.swodxa.org/dxgrant-application/> and elsewhere in this newsletter

Club History: The Southwest Ohio DX Association (SWODXA) is one of the country's premier amateur radio clubs. Though loosely formed in mid-1977, the club had its first formal organizational meeting in August of 1981 where Frank Schwob, W8OK (sk), was elected our first President. While organized primarily as a DX club, SWODXA members are active in all aspects of our hobby.

Requirements for Membership: We welcome all hams who have an interest in DXing. It doesn't matter whether you're a newcomer, or an old-timer to DXing; everyone is welcome! Visit <http://swodxa.org/member.htm>

Meetings: The club meets on the second Thursday of each month alternating locations between at Marions Piazza on Kingsridge Dr. in Dayton, OH or Marions Piazza in West Chester. (Check the website) Members gather early in the private room for dinner and then a short business agenda at 6:30 PM, followed by a program. If you enjoy a night out on the town with friends, you'll enjoy this get together. Meeting attendance is NOT a requirement for membership.

Club Officers: Four presiding officers and the past president (or past VP) make up the Board of Directors. The current roster of officers are: President Tom Inglin, NR8Z; Vice President Kevin Jones, W8KJ; Secretary Mindi Jones, KC8CKW, and Treasurer Mike Suhar, W8RKO.

Website: We maintain websites at www.swodxa.org and www.swodxaevents.org managed by Bill, AJ8B. These sites provide information about a variety of subjects related to the club and DXing.

SouthWest Ohio DX Association (SWODXA)

DX Donation Policy

The mission of SWODXA is to support DXing and major DXpeditions by providing funding. A funding request from the organizers of a planned DXpedition should be directed to the DX committee by filling out an online funding request.

(<https://www.swodxa.org/dx-grant-application/>)

The DX Grant committee will determine how well the DXpedition plans meet key considerations (see below). If the DX Grant committee recommends supporting the DXpedition in question, a recommended funding amount is determined based on the criteria below. The chairman of the committee will make a recommendation at the general meeting on the donation.

Factors Affecting a DXpedition Funding Request Approval

DXpedition destination	Website with logos of club
Ranking on the Clublog Most Wanted Survey	QSLs with logos of club sponsors
Online logs and pilot stations	Logistics and transportation costs
Number of operators and their cre-	Number of stations on the air
LoTW log submissions	Bands, modes and duration of operation

H40GC	H44GC	ZL9HR	XX9D	HK0NA	FT4TA
KH1/KH7Z	EP2A	FT5ZM	C21GC	VK9WA	NH8S
K4M	CY9C	VK9MA	PT0S	FT4JA	YJ0X
6O6O	VP6D	TO4E	XR0ZR	VP8STI	SP8SGI
W1AW/KH8	K1N	3D2C	VK0EK	S21ZBB	E30FB
ST0RY	TI9/3Z9DX	VK9MT	K5P	9U4M	TX3X
VU7AB	3Y0Z	3C0L	TX7EU	CE0Z	3C1L
TI9A	3D2CR	3B7A	K9W	VU7RI	6O7O
C21WW	CE0Z	T30GC	T30L	D68CCC	