



News from



The GLORIOUS SOCIETY OF THE WORMHOLE

July 2018

Hello Worms

Hi Worms,

I am a little late sending this out. I lost track of time. Luckily last night at the Kiwanis Midnight Run Jim KD4MZL asked me if I was ready for Saturday. My mind went blank .. yes, there is a difference when my mind goes blank! I can tell! Anyway he reminded me the first Saturday was this weekend. Thanks Jim. The Midnight Run went well for the runners and the volunteers too. I hope all went well on Field Day for everyone, I worked hard setting up and tearing down for TARC but did not operate.

Talk-in is on the Wormhole repeater system. For those coming to the meeting who cannot hit the repeater we will also monitor the Honeywell club repeater on 443.050 +141.3. Bring a folding chair if you have one.

* IMPROVING THE AUDIO QUALITY OF YOUR STATION – PART 4 *

In the last few articles we have considered most of the controls on the modern receiver as well as the audio amplification.

There are three more controls that you can use. The Noise Blanker, Auto Notch Filter (ANF or BC) and Digital Signal Processor (DSP).

The Noise Blanker may be adjustable on some radios, others are not. This feature will work best on man made noises. Ignitions and pulses that are not fast. If your noise has a detectable frequency to it, the Noise Blanker can do a good job of taking it out. Especially if your NB is adjustable. It can be adjusted to the speed of your interference and many times take it right out.

The Auto Notch Filter or Beat Cancel will do a good job of removing a carrier produced by an AM Broadcast Station or some lid tuning up on you. This feature works quite well and allows you to operate in the vicinity of a commercial AM station.

The Digital Signal processor is no doubt the most sophisticated of the Noise reduction tools.

What does it do digitally, I have no idea. However what it does to the analog signal you are listening to is quite interesting.

If you look at atmospheric noise on an oscilloscope, it will look like a bunch of sharp spikes on a slow scan. However, taking a closer look, by speeding the sweep of the scope, these spikes are really smooth sine waves of different frequencies. Lots of them.

Measuring the frequency with a counter will give you about a 1,800 Hz reading. This is right in the middle of the audio spectrum of about 300 to 3,000 Hz. No wonder it blast our ears off.

When you turn the DSP on, with a little adjustment, you will see several of these sine waves removed. You can vary this with the DSP control. When you read the counter, it will go from 1,800 Hz to anywhere from 200 to 600 Hz. Quite a reduction in noise. However, it is adjustable because some of the reduction will affect the signal you are listening to.

Be sure to look for noises you produce in your home. One of the biggest culprits is the switching power supplies used in many other electronic devices (wall warts). LED lights, florescent lights, power savers, dimmer switches, WIFI routers, cordless phones, tablets and on and on.

We live in a noisy world, but at least we can try and do something about it.

73,
Ralph WD0EJA
BILAL COMPANY
wd0eja@isotronantennas.com

IS THE INTERNET, MILLENNIALS OR FT-8 KILLING AMATEUR RADIO?

By Dan Romanchik, KB6NU

Amateur radio bloggers love to write about the demise of amateur radio. To wit, we have:

- K0NR's Is the Internet destroying amateur radio?
(<http://www.k0nr.com/wordpress/2017/11/internet-destroying-amateur-radio/>)
- N0SSC's Millennials are killing ham radio (<http://n0ssc.com/posts/583-millennials-are-killing-ham-radio>)
- PE4BAS' Is FT-8 damaging amateur radio?
(<https://pe4bas.blogspot.com/2018/04/is-ft8-damaging-hamradio.html>)
- NZ0T's Did Joe Taylor K1JT Destroy Amateur Radio?
(<http://www.ei5di.com/jt.html>)

Of course, none of these posts are really saying that the internet, millennials, or FT-8 has killed amateur radio. What they are saying is that all of these are changing amateur radio as we know it. Well, duh, the way we live our lives changes every day. Why should amateur radio be any different?

For example, Bob, K0NR, discusses how the operation of remote stations is changing the game of DX. Can you really claim that you worked a DX station if you rented time on a super station? I've written about that topic, too (<https://www.kb6nu.com/dx-advisory-committee-wants-to-put-the-screws-to-remote-operation/>).

There has also been much written about how FT8 is changing the amateur radio game. One blog post (<https://ve7sl.blogspot.com/2017/10/160m-ft8-end-of-era.html>), talking about the effect of FT8 on 160m operation, even goes so far to say that this is the “end of an era.” On DX World, the results of the poll, “FT8 – Damaging to Amateur Radio?” (<https://dx-world.net/yes-or-no-a-poll-on-ft8/>) show more than half of the respondents think that FT8 is damaging amateur radio.

I specifically used the word “game” in the previous two paragraphs because that’s exactly what’s changing. The physics of amateur radio certainly isn’t changing. Our transmitters are still generating electromagnetic waves like they have been for decades, and on the HF bands, anyway, those radio waves are bouncing off the ionosphere just as they have been for more than the past 100 years.

What’s changing is the human component. By that I mean what’s changing is how we think people should participate in the hobby. The hams that are complaining that the internet or millennials or FT8 is killing amateur radio are really just complaining that people aren’t participating in amateur radio the way they want them to participate.

Here’s where we talk about millennials. In his blog post, Sterling, N0SSC, suggests that setting up remote stations is one way to engage young people. He writes, “I believe that remote operating, and other internet-assisted means of ham radio operation, are critical to youth engagement.”

He’s also big on an idea he calls “ham radio hackathons.” He writes,

“A hackathon isn’t a coding competition. It’s explained well in this Medium article (<https://medium.com/hackathons-anonymous/wtf-is-a-hackathon-92668579601>). It goes even further than that, not limited to coders and engineers, but open to thinkers, doers, philosophers, system engineers, math people, teachers, students, artists, stakeholders...anyone with an interest in **solving a problem with technology.**”

I support both of these ideas, but I think that millennials (and, to be fair, it isn’t just millennials we’re talking about here, but any newcomers to the hobby) need to step up and get these things going. I don’t think it’s my job to try to get kids interested in amateur radio. I don’t even know if that’s really possible. What I can do,

however, is be there to encourage and support kids (and anyone else that expresses a sincere interest in amateur radio).

For example, I'm not sure how fruitful it would be to set up my station to be remotely operable and then saying to some kids, "Hey, come and operate my station." What I think would be more fruitful is to say to a kid, "Hey, come help me set up my remote control station, so that we both can use it." Then, it turns into a learning situation, and we both gain from the exercise.

The same kind of thing has to happen with ham radio hackathons. The motivation has to come from the ground up, not the top down. I do hope that this idea gets off the ground, though, and I'm standing by, ready to support this effort however I can.

I think that millennials (I'm really getting tired of that term, by the way) need to grab the bull by the horns and take amateur radio in the direction they want it to go. Feel free to kill amateur radio as we know it. Make it better!

When he's not trying to figure out how to save amateur radio, Dan builds stuff, blogs about amateur radio at KB6NU.Com, teaches amateur radio classes, and operates CW on the HF bands. Look for him on 30m, 40m, and 80m. You can email him about what you think is killing amateur radio at cwgeek@kb6nu.com.

ED NOTE: I have heard several people say getting a WAS or DXCC does not mean much now because the FT8 operators can get both in just a couple months even with today's propagation. I know one who got DXCC within three months of getting her General license, all FT8.

*** SOLAR ECLIPSE QSO PARTY ***

This article suggested by Jim Wedlake, KD4MZL

The SEQP was scored by Nathaniel Frissell, W2NAF and Spencer Gunning, K2AEM. The following text is by Ward Silver, N0AX, and is based on information published on the HamSCI website and the Feb 2018 QST article, "The Solar Eclipse QSO Party" by Ward Silver, N0AX.

The question, “Will anybody participate in the Solar Eclipse QSO Party (SEQP)?” Was answered loud and clear on eclipse day, August 21st. The HF bands were busy from the first minute of the SEQP at 1400 UTC to the closing bell at 2200 UTC. Logs were received from 566 stations. Some operated on all bands, others concentrated on one or two. In total, the SEQP generated over 618,000 RBN spots, 630,000 WSPRNet spots, 1.2 million PSKReporter spots, and 29,000 logged QSOs. The Sun may have taken a lunar nap but the bands were full of life!

How was propagation? Excellent for mid-August, actually! The Sun held off on generating any flares or CMEs so conditions were relatively quiet until well after the SEQP was done and the eclipse no longer visible in North America. During the SEQP, the smoothed sunspot number (SSN) was 44, solar flux hit 83, and KP was 3 or less — pretty good in summer near a solar minimum. These quiet geomagnetic conditions made the contact data more valuable since the effect of disturbances was minimized.

It was fairly conclusively demonstrated that the shadow of the eclipse stops ion production in the ionosphere. Amateurs observed Doppler shifts, phase shifts, and amplitude changes in WWV, WWVB, and AM radio station reception. The SEQP observations suggest the F layer rose and the D layer was depleted during the eclipse. While these effects weren’t unexpected, they have been observed in far greater detail than ever before. This data supports the finely-detailed validation of ionospheric and geomagnetic models against the recorded data. That is where “new science” often happens as unexpected subtle behavior of a natural phenomenon is examined and explained.

The first paper to be published was written by HamSCI founding member, Dr. Nathaniel Frissell, W2NAF — "Modeling Amateur Radio Soundings of the Ionospheric Response to the 2017 Great American Eclipse," in which Reverse Beacon Network (RBN) observations of the SEQP were compared with raytracings through an eclipsed version of the physics-based ionospheric model SAMI3. (The paper was published in the American Geophysical Union journal Geophysical Research Letters – see the HamSCI website for more information.)

This initial HamSCI event echoes the success of amateur-research collaboration reaching back nearly a century to the Listening Tests of the early 1920s establishing the ionosphere’s existence. Here we are again! Stay tuned for the next opportunity to contribute your skills as we “advance the radio art!” Thanks to all the stations who participated around the world, generating valuable data and a chance to learn more about how the ionosphere works.

Contest Results The results are in! Congratulations to the top single operators, multi-operators. The SEQP was scored by W2NAF and K2AEM, with final write-up by N0AX. Thank you to all who participated!

Full results PDF: [Solar Eclipse QSO Party - Full Results - Version 1.1.pdf](#)

SEQP Winners

Single Op	Total Score	Multi-Op	Total Score
AA3B		W0ECC	
1 Bud Trench Boyertown, PA	403,975	Elayer Contest Club St. Charles, MO (N0AX, N5OT, & KD0YJN)	191,625
K4BAI		W0D	
2 John Laney, III Columbus, GA	224,502	DeSoto, MO (WB0SND & WB0TUA)	112,553
W1SJ		W5GAD	
3 Mitchell Stern Essex Junction, VT	180,882	Jefferson Amateur Radio Club Metairie, LA (N5LIT, KG5GJT, N5HZ, & NO5W)	93,651

*** DIGITAL LICENSE PLATES ON THE ROAD***

THE VERGE By Andrew J. Hawkins May 30, 2018

Five years after California governor Jerry Brown signed legislation authorizing digital license plates to be sold in his state, the new-fangled digital display boards are finally hitting the streets. According to *The Sacramento Bee*, the new plates began rolling out this week, and unsurprisingly, they don't come cheap.

Motorists who choose to buy the digital plates can register their vehicles electronically and eliminate the need to physically stick tags on their license plates each year, which could save the state money. The digital plates come with their

own computer chips, batteries, and wireless communication systems. They also may be able to display personal messages — if the DMV decides to allow that.

Dealerships are expected to sell the plates for an eye-popping \$699, not including installation costs. Users also must pay a monthly fee of about \$7. The plates are not available through the Department of Motor Vehicles. At present, digital plates are only permitted on the rear of the vehicle. California also requires front plates, so owners still must mount a standard plate there.

A spokesperson for the DMV said there are only 116 vehicles with digital plates currently. Under the pilot, the department must report back to the state legislature by July 2020 about how the plates are performing. “The purpose of the pilot is to identify and detail potential benefits, so we are still in the evaluation phase and won’t make any determinations until the pilot concludes,” the spokesperson added.

Bay Area company Reviver Auto is the sole contractor on the pilot. The firm makes the plate, and it’s beginning to market it for sale at auto dealerships. Later this year, digital plates are also expected to roll out in Florida, Arizona, and Texas.

Neville Boston, founder of Reviver Auto, told the *Bee* he expects initial interest to come from companies for their vehicle fleets:

Some businesses will use them as mini-billboards to advertise their products or services, he said, but will be able to do so only when the vehicle is stopped. The license plate number will still appear on the screen when messages pop up, but it will be smaller and tucked into the upper right corner of the screen.

As with all new technology, cybersecurity and hacking are a concern. While the ability to track a vehicle’s location using the plate’s wireless communication system may be ideal for fleet owners, individual drivers may balk at the idea. The DMV spokesperson deferred questions about privacy to Reviver Auto. We’ll update this story when we hear back from the company.

ED: Go to the website [Reviver Auto](#) to see a short video showing all the different things they can do. Bill

*** HACKERS INFECT 500,000 ROUTERS WITH MALWARE***

Ghacks.net by [Martin Brinkmann](#) on June 11, 2018

Microsoft [announced](#) on Friday that Microsoft Community forum support will be discontinued for several company products including Windows 7 and Windows 8.1.

Microsoft's Answers Community is operated by Microsoft. It has forums for many Microsoft products and Microsoft employees a number of agents, usually third-party contractors, who interact with users who post on the forum.

While the forums are more miss than hit usually when it comes to finding help, they are certainly very popular as lots of users post there on a daily basis.

If you research a Windows or Microsoft product issue using your favorite search engine, you usually get Microsoft Answers results in the top ten listing. The quality of Microsoft Agent support is not always the best, however, as you will get copy and paste responses often at first.

Microsoft won't offer technical support anymore in the following forums starting July 2018:

- Windows 7, 8.1, 8.1 RT
- Microsoft Security Essentials
- Internet Explorer 10
- Office 2010, 2013
- Surface Pro, Surface Pro 2, Surface RT, Surface 2
- Microsoft Band – this topic will be locked.
- Mobile devices forum – Microsoft support will continue in "Other Windows mobile devices" topic
- Zune – this topic will be locked.

The forums will remain available online and community members can still use the forums to post new topics or replies (with the exception of those that are locked in July 2018). Microsoft agents will still moderate the forums to remove spam and other undesirable messages from the forums but they won't interact with users anymore when it comes to providing technical support.

The company notes that "there will be no proactive reviews, monitoring, answering or answer marking of questions".

It is interesting to note that another Microsoft support agent [posted](#) a similar announcement in the Windows 8.1 forum highlighting that Microsoft would do so for products that "reached end of support".

Please be advised that effective July 2018, the forum topics for products that reached end of support will no longer receive technical support from Microsoft agents.

The products listed on that page are Windows 7, Windows 8.1 and Windows 8.1 RT; all three products are [still supported](#) (albeit in extended support). [Windows 7 exited mainstream support in 2015](#), [Windows 8.1 in January 2018](#).

It is unclear if Microsoft's wording is off as Microsoft could mean "extended support" instead of just "support". [Extended support](#) includes paid support and security updates at no additional cost only, and that is what Microsoft could have meant.

Microsoft surely has a plan for 2020 when Windows 7 support ends and it may be the case that the company plans to push users even more towards Windows 10 by ending forum support in July 2018 already.

The forum is a hit and miss for support topics, mostly miss, in my opinion. While it does offer help for some issues, users who post there got canned responses usually that most of the time did not help at all.



CLUB MEETING

The next club meeting is July 7TH. We meet on the first Saturday every month at 11:00 Saturday morning at the Minnreg Building located at 6340 126th Ave N, Largo. Members are welcome to come in the rear area through the fence gate on the southeast corner of the property. Talk-in is on the Wormhole repeater system.

For those coming to the meeting who cannot hit the repeater we will be monitoring the Honeywell club repeater on 443.050 +141.3. We will keep an eye peeled for you. We will take advantage of the cooking facilities with an after-the-meeting Social and Wormdog picnic.



CLUB NETS

Check in on the club net Thursdays at 1930. 442.625 + with a 146.2 tone or the 2M side at 146.850 – also with a tone of 146.2. We are always looking for volunteers to be the net control operator. Anyone interested, talk to one your club officers.



LOCAL NETS

MONDAY

1730 147.030 + Receiver sites and tone info <http://www.qsl.net/wd4scd/> St
Pete Yacht Club ARC

1830 147.060+ no tone St Pete ARC daily net St
Petersburg

1900 144.210 USB Clearwater	CARS, vertical polarization	
1900 147.135 +146.2 Zephyrhills	Zephyrhills ARC	
2000 147.165+ 136.5 Brandon	Brandon ARS	from
2000 50.135 Pinellas County	Pinellas ARK	
2030 NI4CE system system	EAGLE Net, NTS traffic net,	NI4CE
2030 145.450 Pinellas County	Pinellas ARK	
TUESDAY		
1830 147.060 no tone Petersburg	St Pete ARC daily net	from St
1900 50.200 USB Brandon ARS	6M net	
1900 28.450 Clearwater	WCF section net	
1900 NI4CE system system	WCF Section VHF ARES	NI4CE
1930 145.170 & 442.4 both pl 156.7	Pinellas ACS net	Clearwater
1930 444.900 +141.3	Sheriff's Tactical ARC	Tampa
2000 NI4CE system system	WCF Skywarn net	NI4CE
2000 147.105+ 146.2 Tampa	Tampa ARC net	from

2000 28.365 USB ARS	simplex	Brandon
2030 NI4CE system system	EAGLE Net, NTS traffic net	NI4CE
2100 28.465 USB	10/10 net	from Orlando

WEDNESDAY

1930 146.30 simplex net from Tampa	Hillsborough ARES/RACES	
1830 147.060 no tone Petersburg	St Pete ARC daily net	from St
1930 52.020 simplex Petersburg	Suncoast 6'ers	from St
1930 NI4CE system system	WCF Section Digital Info Ne	NI4CE
2000 147.105 146.2 Tampa	Greater Tampa CERT net	from
2000 146.97- 146.2 Clearwater	Clearwater ARS	from
2030 NI4CE system system	EAGLE Net, NTS traffic net	NI4CE
2100 NI4CE system affiliated	Tampa Bay Traders Net	non-

THURSDAY

1800 146.52 simplex Tampa	Hillsborough ARES/RACES	North
1830 147.060 no tone Petersburg	St Pete ARC daily net	from St

1900 444.750 +146.2 Tampa	Fusion net	from
1930 146.850- & 442.625+ both pl 146.2 Petersburg	Wormhole	from St
1930 146.6385 -127.3 Lakeland	Lakeland ARC	from
1915 224.660- no tone Petersburg	St Pete ARC	from St
2030 NI4CE system system	EAGLE Net, NTS traffic net	NI4CE

FRIDAY

1830 147.060 no tone Petersburg	St Pete ARC daily net	from St
2030 NI4CE system system	EAGLE Net, NTS traffic net	NI4CE

SATURDAY

0730 3.940 (7.281 Alt.)+/- QRM WCF	WCF Section HF Net	from
1830 147.060 no tone Petersburg	St Pete ARC daily net	from St
2030 NI4CE system system	EAGLE Net, NTS traffic net	NI4CE

SUNDAY

0800 3.933	Florida Traders Net	non-affiliated
1830 147.060 no tone Petersburg	St Pete ARC daily net	from St

1930 NI4CE system system	WCF Section Net	NI4CE
2000 147.550 simplex Pinellas County	550 Simplex Net	
2030 NI4CE system system	EAGLE Net, NTS traffic net	NI4CE
2100 144.210 USB orientation	Clearwater ARS	vertical

FOR SALE / WANTED

Anyone having something for sale or who might be looking for an item let me know. I will not print phone numbers or email addresses unless specifically told to since this newsletter might end up on the web. The exception is when I get the information off the web. If you are a member of the Wormhole then you have all the information you need on a club roster and if you are not a member .. why not? OK, if you are not a member you can contact me at the email address at the end of this newsletter, I will give you the information to contact the person involved.

FOR SALE, For sale: New MFJ TNC 1270X, never used in original box with manual and cables. \$30. Dean Sever W8IM

FOR SALE, Mosley TA-33M 10-15-20M beam with the 40M add on kit. Antenna is on the ground and in good shape. There are several parts that need replacement. The 40M kit is new in box. Antenna is broken down into six or seven feet sections so easy to handle. Asking \$400, talk to me, Bill AG4QX at arrl dot net or see me at the meeting.

FOR SALE, Cushcraft A4S 10-15-20M beam, on the ground. There are several parts that need replacement. Asking \$300, talk to me, Bill AG4QX at arrl dot net or see me at the meeting.

FOR SALE, 13 element, 14.5 ft 220 beam. Wormhole property, \$20, contact Bill AG4QX or any other officer. **Free to any Wormhole member or other club.** Pickup at Bill's house.

HAMFESTS

- August 18** **TARCFest**, TARC Clubhouse, 22nd St at the river, \$4 entry plus \$3 to tailgate, inside tables \$15 in advance, talkin on 147.105 +146.2, more info at <http://hamclub.org/>
- November 3** **LARC Hamfest**, Lakeland, Revolution Church of Lakeland, 7315 Kathleen Road, Talk-In on 146.685 tone 127.3, For info contact Kevin Rought , N4KWR 863-393-4336
<http://lakelandarc.org>
- November 10** **SPARCFest**, Pinellas Park, SPARCFest, admission FREE, tailgate free, Freedom Lake Park, 9990 46th St N, Southeast corner of US 19 and 49th Street, Talk-in on 147.060+ no tone. VE testing at 0900. For more information go to <http://www.sparc-club.org/sparcfest.html>
- December 7 & 8** **Plant City, the 2018 Tampa Bay Hamfest is the West Central Florida Section Convention, Friday and Saturday, at the Expo Building in the Strawberry Festival grounds, advanced admission \$9, at the door \$10, for information contact Bill Williams AG4QX, chairman@fgcarc.org or go to <http://www.tampabayhamfest.org> or you can just ask me, Jim or Dee at a meeting ;-)**
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Mid January

Frogman swim in Tampa Bay.

<http://www.tampabayfrogman.com/>

Last full weekend January	Winter Field Day, http://www.sparhams.org/index.php
Late January	Gasparilla celebration
Late February	West Central Florida Tech Conference http://arrlwcf.org/wcf-special-events/wcftechconference/
March/April	MS Walks
March/April	Mass Casualty Exercises
Late April	Southeastern VHF Society Conference, http://www.svhfs.org
Late April	March For Babies (was March of Dimes) https://www.marchforbabies.org/Registration/Events
Late April	Florida QSO Party
Early to Mid May	BikeMS Citrus Tour bike ride http://www.citrustour.org/register.php
Mid-May	Annual Armed Forces Crossband Test
Mid-May	Florida Hurricane Exercise
Late May	Wormfest
Early June	Museum Ships on the Air
Fourth weekend in June	Field Day http://www.arrl.org/contests/announcements/fd/
July 3/4	Midnight Run in Largo http://www.kiwanismidnightrun.com/
August	International Lighthouse/Lightship Week https://illw.net/
October, 3 rd weekend	JOTA, Scout Jamboree-on-the-AIR (around 14.280MHz)
Early December	ALS bike ride in Walsingham Park
December, first full weekend	Ride & Run With The Stars in Fort DeSoto Park
December, Second weekend	Tampa Bay Hamfest http://www.fgcarc.org/

YOUR WORMHOLE OFFICERS

Bill AG4QX is President and editor of this newsletter, Treasurer is Jim KD4MZL, Paul KA4IOX is the Secretary, Dee N4GD is the Repeater Trustee and Mike K4ZPE is both our club Vice President and webmaster.

YOUR WORMHOLE REPEATERS

442.625 + PL 146.2

146.850 - PL 146.2

The Wormhole repeaters are both now dual mode Yaesu DR-1X. FM analog as always and now Yaesu Fusion, a C4FM/FM digital mode. The repeater crew updated the software on May 3, 2016.

The Wormhole website is at: <http://www.TheWormholeSociety.org>.

West Central Florida Section website: <http://www.arrlwcf.org/>.

The ARRL website is at: <http://www.arrl.org/>

This newsletter is written for The Glorious Society of the Wormhole, an ARRL affiliated amateur radio club located around the Seminole section of Pinellas County Florida. Anyone wishing to be added or removed from The Glorious Society of the Wormhole mailings please write to me at the address below and thy will be done.

73,
Bill Williams
AG4QX
ag4qx AT arrl DOT net