

News from



The GLORIOUS SOCIETY OF THE WORMHOLE

April 2022

Hello Worms

Thanks to Jim for running the March meeting, well done! We meet again face to face for those who wish to do so. Alternately, if Alan is in attendance, we will again try to broadcast the meeting on the repeater and video. We will meet at the regular meeting time of 1100 on Saturday morning at the Lurie Civic Building on the St Petersburg College campus in Seminole. Turn west at the light at 113th St N and about 92nd Ave N. It's the first building on the north side. Here is a link to a Google map : [Google Maps](#) . There are a few parking spots at the Chamber building but if you go another 100 yards past you can park in the college parking lot which is a lot closer to the outside meeting area. Below is the Zoom information, the astute of you will probably recognize that it is the same as last month ... and February meeting ... and January meeting, and also all the FGCARC meetings. I only have one Zoom meeting I use for everything , same link and same passcode ;-)

Topic: Bill Williams' Zoom Meeting

Time: This is a recurring meeting Meet anytime

Join Zoom Meeting

<https://zoom.us/j/2737114584?pwd=d1BETHVOQ21vWWZXZ0lYQ0FIWWtldz09>

Meeting ID: 273 711 4584

Passcode: worm

BRING YOUR CHAIR and lunch! There are a few picnic benches if you do not have a folding chair but they are not comfortable. We will not be cooking but we have access to the Chamber

of Commerce building which has a microwave and a toaster oven so you can heat up/cook what you bring. Also bring your lunch and coffee if you want it.

In January I switched from Office 2010 to Office 2019. I needed to be able to read and use docs I got from others and my software was getting too old. Anyway I have noticed one thing different about WORD docs. The word spacing is different, they are closer together now. I have not tried to find if this is adjustable but do wonder if it is too close for you. Let me know.

TARCFest is next Saturday, April 9th. See you there.

Next Saturday, the 9th, is also the West Central Section SET (Simulated Emergency Test) day.

The Florida QSO party is April 30th and May 1st. Find the rules here/;

<http://www.floridaqsoparty.org/>

FreeDOS RELEASES NEW VERSION 1.3

[DAVE LECLAIR](#) FEB 25, 2022

Windows is a great operating system, but sometimes you want to go old school and get that DOS experience. That's exactly what you can get with FreeDOS and its [new version 1.3 update](#).

[MS-DOS](#) officially ended with the launch of version 6.22 all the way back in 1994, but the FreeDOS project has kept the old-school OS alive and well over the years with full MS-DOS compatibility. And for the first time in six years, FreeDOS has received a major update, bringing it from version 1.2 to 1.3.

The update adds the new Kernel 2043 and an 8086 version with [FAT32](#) support. It also features support for the new [FreeCOM 0.85a](#).

If you run the [floppy](#) Edition of FreeDOS, version 1.3 requires fewer diskettes, which is always a good thing.

There are plenty of other smaller changes, which you can read about in the [changelog](#). The development team is very excited about the new release, and the team expressed it in a blog post: "I'm very excited for FreeDOS 1.3 – THANKS TO EVERYONE for your help in making this new release! The new FreeDOS 1.3 reflects all the hard work of everyone who wrote code, translated messages, edited documentation, tested new versions, offered support, and all the other things that go into a new version."

If you're looking to run DOS for whatever reason, FreeDOS is a fantastic way to make it happen. Whether you want to play some old-school games or you just want to experience some retro computing, there are plenty of reasons to play with DOS.

CARS LOSE CONNECTIVITY WHEN 3G IS TURNED OFF

Consumers Reports by Keith Barry January 11

As wireless carriers prepare to shut down their 3G networks over the coming months, millions of cars may lose the ability to automatically contact first responders after a crash. Some vehicles just need a software or hardware upgrade, but others—including vehicles from Chrysler, Dodge, Hyundai, Jeep, Lexus, Nissan, Ram and Toyota—will lose their connections permanently.

Automatic crash notification, which alerts first responders after a crash via a built-in cellular connection, often relies on aging 3G cellular networks to connect drivers with emergency services and share a vehicle's location. Even though automakers have been aware that these networks are shutting down permanently between February and July, many manufacturers still relied on it until as recently as the 2011 model year.

“Shutting down the 3G network to prioritize newer technologies is positive in the long run,” says Alex Knizek, an automotive engineer at CR. “But it is disappointing that some automakers have failed to offer a solution to owners of 3G-connected vehicles, leaving them unable to take advantage of proven and valuable safety features, as well as other beneficial connectivity functions.”

From your editor: The whole article is too long for this publication. Go to <https://www.consumerreports.org/car-safety/3g-wireless-network-shutdown-impact-on-car-safety-a2215482633/> for the complete article including information on each auto manufacturer and what they are doing to mitigate the problem.

***ONE-RING PHONE SCAM CAN DING YOUR WALLET ***

Federal Trade Commission February 10, 2014 by Colleen Tressler, Consumer Education Specialist

Who's calling now? That number doesn't ring a bell. Hold the phone, says the Federal Trade Commission. You could be a potential victim of the growing "one-ring" cell phone scam.

Here's how it works: Scammers are using auto-dialers to call cell phone numbers across the country. Scammers let the phone ring once — just enough for a missed call message to pop up.

The scammers hope you'll call back, either because you believe a legitimate call was cut off, or you will be curious about who called. If you do, chances are you'll hear something like, "Hello. You've reached the operator, please hold." All the while, you're getting slammed with some hefty charges — a per-minute charge on top of an international rate. The calls are from phone numbers with three-digit area codes that look like they're from inside the U.S., but actually are associated with international phone numbers — often in the Caribbean. The area codes include: 268, 284, 473, 664, 649, 767, 809, 829, 849 and 876.

If you get a call like this, don't pick it up and don't call the number back. There's no danger in getting the call: the danger is in calling back and racking up a whopping bill.

If you're tempted to call back, do yourself a favor and check the number through online directories first. They can tell you where the phone number is registered.

If you've been a victim of the "one-ring" scam, try to resolve the charges with your cell phone carrier. If that doesn't work, file a complaint with the [Federal Trade Commission](#) and the [Federal Communications Commission](#).

And as a general rule: Read your phone bill often — line by line. If you don't recognize or understand a charge, contact your carrier.

*** THE TERMINATOR HAS ARRIVED***

Spaceweather.com by Dr Tony Phillips February 2022

Something big just happened on the sun. Solar physicists Scott McIntosh (NCAR) and Bob Leamon (U. Maryland-Baltimore County) call it "The Termination Event." "Old Solar Cycle 24 has finally died--it was terminated!" says McIntosh. "Now the new solar cycle, Solar Cycle 25, can really take off."

The "Termination Event" is a new idea in solar physics, outlined by McIntosh and Leamon in [a December 2020 paper](#) in the journal *Solar Physics*. Not everyone accepts it--yet. If Solar Cycle 25 unfolds as McIntosh and Leamon predict, the Termination Event will have to be taken seriously.

The basic idea is this: Solar Cycle 25 (SC25) started in Dec. 2019. However, old Solar Cycle 24 (SC24) refused to go away. It hung on for two more years, producing occasional old-cycle sunspots and clogging the sun's upper layers with its decaying magnetic field. During this time, the two cycles coexisted, SC25 struggling to break free while old SC24 held it back.

"Solar Cycle 24 was cramping Solar Cycle 25's style," says Leamon.

Researchers have long known that solar cycles can overlap. The twist added by McIntosh and Leamon is the realization that overlapping cycles can interact. This makes sense. In the early 20th century, George Ellery Hale discovered that the magnetic polarity of sunspot pairs reverses itself from one cycle to the next; indeed, the sun's entire global magnetic field flips every ~11 years. When adjacent, opposite-polarity solar cycles overlap, they naturally interfere.

Termination Events mark the end of interference, when a new cycle can break free of the old.

The timing of the Termination Event can predict the intensity of the new cycle. In their *Solar Physics* paper, McIntosh and Leamon looked back over 270 years of sunspot data and found that Termination Events happen every 10 to 15 years.

"We noticed that the longer the time between terminators, the weaker the next cycle would be," explains Leamon. "Conversely, the shorter the time between terminators, the stronger the next solar cycle would be."

So when did the latest Termination Event happen? Dec. 2021. This yields a specific, testable prediction for Solar Cycle 25.

"We have finalized our forecast of SC25's amplitude," says McIntosh. "It will be just above the historical average with a monthly smoothed sunspot number of 190 ± 20 ."

"Above average" may not sound exciting, but this is in fact a sharp departure from NOAA's [official forecast](#) of a weak solar cycle. It could be just enough to catapult Terminators into the forefront of solar cycle prediction techniques. **Stay** tuned. We'll be back.

Editor: For a pretty solar cycle graph go to <https://spaceweatherarchive.com/2022/02/25/the-termination-event-has-arrived/>

THE BEST WAY TO OPERATE HF

Ralph WD0EJA

HOW HIGH SHOULD AN ANTENNA BE? This question is asked quite frequently. Actually what many want to know is, how low to mount the antenna to where it will still work? There is much to learn about HF propagation. However, a few basics can help to achieve good results.

On VHF and higher you can go by the rule, "the higher the better". This is a ground wave transmission. You can liken it to line of sight. If you were to raise yourself above ground, you would see a farther distance to the horizon. So will the ground wave. On VHF, this will increase the performance in distance. Actually on VHF in particular, it is more forgiving and will bend with the terrain somewhat. This is a reason for using VHF for police and fire in rural areas. We are referring to distances of 10 to 15 miles car to car (depending on power) and as much as 100 miles through a repeater at a very high altitude.

What happens at the HF frequencies? A lot! HF is normally used for much longer distances than the VHF ground wave. Therefore, where do you start and what factors affect it?

There is one thing to keep in mind. HF radiation rarely reflects. Due to the low frequency, there is insufficient inductance in objects to make it reflect. However, there are other factors that affect HF. We can start with what you are walking on. The soil conditions of the earth varies per location. Conductivity and various minerals in the soil affect HF communications. Depending on this chemistry will determine how much HF radiation will be absorbed and not leave the antenna site. What do you look for?

If the antenna is very low to the ground, you can observe the performance. Tuning of the antenna is one factor. Is the antenna reacting peculiar? Minimum SWR a bit too high? If measured, is the impedance of the antenna very low. Possibly receiving performance has deteriorated severely. Another check is measuring SWR at low power as compared to high power. If at low power the SWR is closer to normal and high power it increases a lot, then a nearby object is most likely having an affect. Like the earth. Radiation can be absorbed and due to a transformer affect radiate some RF back into the antenna or possibly the feedline laying on it. This will increase the SWR and can make the antenna very narrow in bandwidth. If this is the case, Raising the antenna even a few feet will make a change toward normal functioning of the antenna.

We can usually use the same rule as VHF, "the higher the better". However, when you are limited in what you can do, you will want to know the minimum you can get away with. HF will start performing reasonably well if you can get sufficient height from your ground absorption factor. On the average, 20 feet will do it. Some areas are more forgiving and some areas are worse. You will get indications of it by taking note of the readings mentioned.

Next article will continue on this subject.

73,

Ralph WD0EJA

BILAL COMPANY

wd0eja@isotronantennas.com

*CURIOSITY FINDS A MARTIAN 'FLOWER' *

mars.nasa.gov March 01, 2022

Smaller than a penny, the flower-like rock artifact on the left was imaged by NASA's Curiosity Mars rover using its Mars Hand Lens Imager (MAHLI) camera on the end of its robotic arm. The image was taken on Feb. 24, 2022, the 3,396th Martian day, or sol, of the mission. The "flower," along with the spherical rock artifacts seen to the right, were made in the ancient past when minerals carried by water cemented the rock.

Curiosity has in the past discovered a diverse assortment of similar small features that formed when mineralizing fluids traveled through conduits in the rock. Images of such features are helping scientists understand more about the prolonged history of liquid water in Gale Crater.

Curiosity was built by NASA's Jet Propulsion Laboratory in Southern California. Caltech in Pasadena, California, manages JPL for NASA. JPL manages Curiosity's mission for NASA's Science Mission Directorate in Washington. MAHLI was built by Malin Space Science Systems in San Diego.

For tis article with picture go to: <https://mars.nasa.gov/resources/26587/curiosity-finds-a-martian-flower/>

For more about Curiosity, visit mars.nasa.gov/msl/home/ or nasa.gov/msl.



CLUB MEETING

We will again have a face to face club meeting in April. We will try to keep up on the 2M and also video concurrent on a video service. The meeting will be held at the Lurie Civic Building which is the new Greater Seminole Area Chamber of Commerce. It is located on the St Petersburg College campus in Seminole. Turn west at the light at 113th St N and about 92nd Ave N.



CLUB NETS

Check in on the club net Thursdays at 1930 and 2000 (or at the end of the 2M net). 2M at 146.850 – with a tone of 146.2. Our 6M net runs after our regular 2M net on 53.150 – 1MHz offset 146.2 tone.



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	CARS, vertical polarization	Clearwater
1900 147.135 +146.2	Zephyrhills ARC	Zephyrhills
2000 147.165+ 136.5	Brandon ARS	from Brandon
2000 50.135	Pinellas ARK	Pinellas County
2030 NI4CE system	EAGLE Net, NTS traffic net,	NI4CE system
2030 145.450	Pinellas ARK	Pinellas County

TUESDAY

1830 147.060 no tone	St Pete ARC daily net	from St Petersburg
1900 50.200 USB	6M net	Brandon ARS
1900 28.365 USB	10M Net	Clearwater
1900 NI4CE system	WCF Section VHF ARES	NI4CE system
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	WCF Skywarn net	NI4CE system
2000 147.105+ 146.2	Tampa ARC net	from Tampa
2000 28.365 USB	simplex	Brandon ARS
2030 NI4CE system	EAGLE Net, NTS traffic net	NI4CE system
2100 28.465 USB	10/10 net	from Orlando
1900 146.490 simplex	3 RD Tuesday monthly, Hillsborough Co ARES simplex Net	

WEDNESDAY

1830 147.060 no tone	St Pete ARC daily net	from St Petersburg
1900 147.165 + 136.5	Humpday Net	from Bandon
1930 52.020 simplex	Suncoast 6'ers	from St Petersburg
1930 NI4CE system	WCF Section Digital Info Ne	NI4CE system
2000 147.105 146.2	Greater Tampa CERT net	from Tampa
2000 146.97- 146.2	Clearwater ARS	from Clearwater
2030 NI4CE system	EAGLE Net, NTS traffic net	NI4CE system
2100 NI4CE system	Tampa Bay Traders Net	non-affiliated
0000-2359 HF Winlink	Winlink Wednesday Net https://winlinkwednesday.net/reminder.html	

THURSDAY

1800 146.52 simplex	Hillsborough ARES/RACES	North Tampa
1830 147.060 no tone	St Pete ARC daily net	from St Petersburg
1900 444.750 +146.2	Fusion net	from Tampa
1915 224.660- no tone	St Pete ARC	from St Petersburg
1930 146.6385 -127.3	Lakeland ARC	from Lakeland
1930 444.225 + 146.2	Hillsborough ARES/RACES	from Tampa
1930 146.850- 146.2	Wormhole	from St Petersburg
2000 53.150 -1MHz 146.2	Wormhole	from St Petersburg
2030 NI4CE system	EAGLE Net, NTS traffic net	NI4CE system

FRIDAY

1830 147.060 no tone	St Pete ARC daily net	from St Petersburg
1900 3.830 LSB	Brandon 80M Net	from Brandon
2030 NI4CE system	EAGLE Net, NTS traffic net	NI4CE system

SATURDAY

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

SUNDAY

0800 3.933	Florida Traders Net	non-affiliated
1830 147.060 no tone	St Pete ARC daily net	from St Petersburg
1930 NI4CE system	WCF Section Net	NI4CE system
2000 147.550 simplex	550 Simplex Net	Pinellas County
2030 NI4CE system	EAGLE Net, NTS traffic net	NI4CE system
2100 144.210 USB	Clearwater ARS	vertical orientation

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 can ask club members for the persons contact information. 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,

HAMFESTS

2022

- April 9** **TARCFest** TARC Clubhouse, 22nd St at the river, \$5 entry including tailgate, a few inside tables reserved in advance, talkin on 147.105 +146.2, more info at <http://hamclub.org/>
- May 20-22 Dayton Hamvention 2022, Xenia Fairground and Expo Center, vendor reservations and advance tickets now available. Tickets \$26 advance, \$31 at the door. <https://hamvention.org/>
- May 28** **WormFest 2021, Pinellas Park, admission FREE, tailgate free, Freedom Lake Park, 9990 46th St N, southeast corner of US 19 and 49th Street, 33782. Park opens at sunrise for vendor setup, hamfest starts at 0800. Talk-in on 146.850 – 146.2. All FREE! For a map and directions see <http://www.TheWormholeSociety.org> .**
- August 20** **TARCFest** TARC Clubhouse, 22nd St at the river, \$5 entry including tailgate, a few inside tables reserved in advance, talkin on 147.105 +146.2, more info at <http://hamclub.org/>



- | | |
|---------------------------|---|
| Mid January | Adventure Run, Honeymoon Island |
| Last full weekend January | Winter Field Day, https://www.winterfieldday.com/ |
| Late January | Gasparilla celebration |
| Late February | West Central Florida Tech Conference |
| | http://arllwcf.org/wcf-special-events/wcftechconference/ |
| March | MS 150 Citrus Tour bike ride |
| | http://www.citrustour.org/register.php |
| March/April | MS Walks |
| March/April | Mass Casualty Exercises |
| Late April | Southeastern VHF Society Conference, |
| | http://www.svhfs.org |
| Late April | Florida QSO Party |
| Mid May | March For Babies (was March of Dimes) |
| | https://www.marchforbabies.org/Registration/Events |
| Mid-May | Annual Armed Forces Crossband Test |
| Mid-May | Florida Hurricane Exercise |
| May, Memorial Day Weekend | Wormfest |
| First weekend in 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/	
Third weekend in 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, 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

53.150 -1Mz PL 146.2

442.625 +5Mz PL 146.2

146.850 - 600Kz PL 146.2

The Wormhole 2M and 440 repeaters are both now dual mode Yaesu DR-1X. FM analog as always and Yaesu Fusion, a C4FM digital mode.

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