News from





The GLORIOUS SOCIETY OF THE WORMHOLE

March 2022

Hello Worms

I will not make the meeting this month as I will be volunteering for the MS Citrus Tour bicycle race. As we do not currently have a vice-president Don AK4SJ volunteered to run the meeting but a situation came up that precluded his involvement so Jim KD4MZL has volunteered, thank you Don and Jim.

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 is 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.

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.

As always before a regular meetings there are members on the repeater before the meeting time so jump in there and chew the rag.

Zoom MAY enforce the 40 minute limit on the free accounts. We had the Wormhole cut off. If that happens we may restart the meeting depending on where we are in the meeting.

Topic: Bill Williams' Zoom Meeting

Time: This is a recurring meeting Meet anytime

https://zoom.us/j/2737114584?pwd=d1BETHVOQ21vWWZXZ0IYQ0FIWWtldz09

Meeting ID: 273 711 4584

Passcode: worm

For the meeting do not forget ... BRING YOUR CHAIR, lunch and coffee!

SSB - SINGLE SIDE BAND*

Ralph WD0EJA

FM mode has been included on many of the newer radios for HF. It is mainly used on the 10 meter band on HF. It is the mode of choice for VHF and UHF bands.

What is it?

Keep in mind what it is called, "Frequency Modulation". This means there is a change in frequency from where you have set your radio.

Someone had to really think up side down to figure this one out. Let's use 7.0 MHz for our set frequency. When you add audio on the FM mode, the amplitude of the signal does not change. If you are transmitting at 100 watts, you are sending the full 100 watts out with no variation like on AM or Single Side Band. Much like a CW signal with no interruption until you quit transmitting.

When you add audio, the set frequency (7.0 MHz) will shift. It will shift above 7.0 MHz and below 7.0 MHz at the audio frequency. Therefore, if you have a 500 Hz tone as your audio, the frequency where you have set your radio (7.0 MHz) will change plus and minus this frequency at 500 Hz per second.

Keep in mind, if you have no audio, the frequency is the same as a CW signal.

What makes the audio louder or softer?

As you increase the volume of the audio, or drive the transmitter harder, the frequency change, or shift will also increase. This means that the louder the audio the farther away from 7.0 MHz you will transmit on the audio peaks.

You can see it is a little different way of thinking on FM.

The transmit and receiver circuits change this "Deviation" to audio that our ears understand.

Therefore, there needs to be limits on the "Deviation", or it will take up quite a bit of space on the band. It has recently been an FCC requirement for commercial 2 way radios to go to a more narrow "Deviation". This will allow more frequencies to be used.

One prominent advantage to FM is the clarity of the audio. You can have a full spectrum of audio without taking up more bandwidth. Also the transmitter is operating at full power

constantly. This allows for the receiver to have "full quieting". Another words, no back ground noise if you are hearing the signal well enough.

The "Deviation" of frequency is controlled to keep it within limits. If it is a Narrow Band system, you still have full power out, full quieting on receive and excellent frequency response. What you will not have is the volume of audio. However that is compensated either with the volume control or more amplification in the radio.

You can use the FM mode, without adding audio, to send a carrier to check the SWR of your antenna system. The carrier will be the full power that you set your transmitter at.

If any have questions you would like to have addressed, let me know. Right or wrong, I am sure I can come up with something.

73, Ralph WD0EJA BILAL Company wd0eja@isotronantennas.com Jan 2022

RADIO STATION SNAFU BRICKS SOME MAZDA INFOTAINMENT SYSTEMS

arstechnica by JONATHAN M. GITLIN - 2/9/2022

Some Mazda owners in the Seattle area are stuck with bricked infotainment systems after listening to a particular radio station.

According to the Seattle Times, the problem began on January 30 and afflicted Mazdas from model years 2014 to 2017 when the cars were tuned to the local NPR station, KUOW 94.9. At some point during the day's broadcast, a signal from KUOW caused the Mazdas' infotainment systems to crash—the screens died and the radios were stuck on 94.9 FM.

From there, the infotainment systems became trapped in a rebooting loop, never successfully completing the task. When afflicted owners took their cars to be checked at local Mazda dealers, they were told that the "connectivity master unit" was dead and needed to be replaced.

The snag? A new CMU costs \$1,500—if you can find one, which you can't, because of supply chain problems.

The problem, according to Mazda, was that the radio station sent out image files in its HD radio stream that did not have extensions, and it seems that Mazda's infotainment system of that

generation needs an extension (and not a header) to tell what a file is. No extension, no idea, and the system gets corrupted.

The Seattle Times contacted KUOW and Xperi, a technology company responsible for the HD radio technology, which told the paper that the company is aware of the issue. Mazda told Ars that it has distributed service alerts to dealers advising them about the problem, and although replacement MCUs are currently delayed, they should be replaced free of charge. "These customers should contact their local Mazda dealer, who can submit a goodwill request to the Mazda Warranty department on their behalf, order the parts, and schedule a free repair when the parts arrive," Mazda said.

*MOST RANSOMWARE MONEY TIED TO RUSSIA *

INFOPACKETS by John Lister on February, 16 2022

Nearly three in every four dollars paid to ransomware scammers goes to Russian-affiliated groups according to new research. The authors also accuse Russia of turning a blind eye to large-scale money laundering.

The figures come from Chainalysis, which tracks crime involving cryptocurrencies. These are "virtual" currencies such as Bitcoin where all transactions are tracked on a public "ledger".

The way cryptocurrencies work means its relatively straightforward to track the amount of money a particular user has spent or received. However, it's often difficult to prove who a particular user is.

Chainalysis began by gathering together records of payments to addresses (accounts) known to be used by ransomware scammers to receive money from victims. They then looked for signs of Russian connections. (Source: chainalysis.com) In cases covering 26.4 percent of revenue, the ransomware in question had code that blocked it from infecting computers from Russia and neighboring former-Soviet states. A further 9.9 percent of revenue had links to EvilCorp, a criminal group known to be based in Russia.

Meanwhile a further 36.4 percent had other signs of Russian connections such as language or location. That left just 27.4 percent of ransomware revenue going to scammers with no clear ties to Russia. The research also found around 13 percent of payments made from ransomware addresses went to Russian sources. That's likely a sign of using locally-based money laundering operations.

Further analysis of Moscow-based organizations that receive cryptocurrency payments (similar to financial exchanges or banks in the physical world) suggested that just a handful of organizations handled cryptocurrency worth as much as a billion dollars in a three-month period.

Of this money, up to half came from accounts linked to "illicit" activity, ranging from ransomware and other scams to paying for goods and services that were themselves illegal. (Source: bbc.co.uk)

How seriously Russia takes such activity is open to question. Officially the country has made some arrests of alleged ransomware scammers. However, critics argue the Russian government is happy to let the scammers and money launderers operate because of its destabilizing effect on Western governments.

* FAKE WINDOWS 11 DOWNLOAD SCAM*

PCWORLD By Michael Crider

When it comes to computer security, one must remain ever vigilant. If you need a refresher on that lesson, <u>HP's Threat Research department</u> is ready to give you one today. Researchers spotted an incredibly convincing fake website, purporting to offer Windows 11 upgrades straight from Microsoft. Instead it served up a heaping helping of malware.

The scam is actually pretty impressive. The operators of "windows-upgraded.com" (now decommissioned) copied Microsoft's presentation and style perfectly, with a big friendly "download now" button for all those interested in an upgrade or clean install. What duped users actually got was a 1.5MB ZIP file containing "Windows11InstallationAssistant.exe", which downloads a DLL disguised as a JPEG file.

The end result is the installation of the well-known RedLine Stealer malware suite, dedicated to swiping usernames, passwords, credit card numbers, and cryptocurrency information, among other tasty bits of user data.

Similar fake downloads for popular bits of software, like the Discord chat program, have been seen before. HP's analysis reminds us to always be wary of download sites, even if they're found via reputable search engines, and always keep that anti-virus scanner running. Oh, and if you want to know how to legitimately download and apply the update for Windows 11, check out our exhaustive guide here.

RASPBERRY PI LOW-POWER BACKUP STORAGE

How-To-Geek JASON FITZPATRICK

We all should regularly backup our computer and I always plan to but rarely do, my round-to-it seems to fade away too often. I am not saying that I will be doing this butat least I know I can.

Looking for a secure low power always-on computer or network backup? This article shows you how to make one using a RASPBERRY PI and one or two low cost USB solid state drives and a version of Linux. While I have not done this the directions are pretty direct and seem doable. The way it is done puts your data behind a Linux wall. Should there be a need the SSDs can be plugged directly into a Windows machine to access all the data. It uses about \$5 worth of power to run for the year. There are other ways to backup you data every day but this one sound like fun to do. I am not sure how long this link will be active so if interested I suggest you copy and save the article.

https://www.howtogeek.com/139433/how-to-turn-a-raspberry-pi-into-a-low-power-network-storage-device/

*DELOREAN EV ON THE WAY *

interestingengineering.com By Chris Young

The DeLorean will come back to the future as a luxury EV in 2022. But it won't take you back to the 1980s. Or will it?

Texas-based DeLorean DMC, the company that owns the rights to the DeLorean will launch a sports car version of the famous hybrid time machine-car later this year, a <u>report from AutoCar</u> reveals.

Though the first iteration of the DeLorean halted production after the DeLorean Motor Company (DMC) filed for bankruptcy in the 1980s, the car has lived on in popular culture and in various guises over the years. In 2019, for example, Stanford engineers developed a <u>self-driving</u>, <u>drifting</u> <u>DeLorean</u> called Marty, after the character in 1985's 'Back to the Future' franchise that is largely responsible for the car's fame.

Now, DeLorean DMC, founded by British engineer Stephen Wynne after acquiring the rights to the car in 1995, provided a new update on Twitter, alongside a short teaser video.

Though the update didn't provide much at all in the way of details, it did reveal that the new model will be called the DeLorean EVolved — to signify the fact that it will be an electric vehicle. The company

also wrote "#luxury" in its tweet, suggesting the new version of the vehicle will be a high-end sports vehicle.

The one concrete detail the teaser video does reveal is that the new DeLorean will retain the gullwing doors of previous designs, including the original DMC model. Last year, <u>DMC hinted that</u> it might be bringing the famous car back as an electric vehicle. In a blog post, the company wrote "It certainly makes for an easier path through emissions maze which still looms large over any internal combustion engine. While an electric Cobra or Morgan may be a little extreme for their potential market, we've already seen that an EV DeLorean – as we displayed at the 2012 New York International Auto Show – is not such an 'out there' idea."

Another company, design house Italdesign, also showed off a teaser image last year, suggesting it might be collaborating on the DMC's upcoming project. Italdesign's founder, Giorgetto Giugiaro, worked on the original DMC car. Notably, however, there is no information on an electric powertrain supplier, though Italdesign did recently sign an agreement with British firm Williams Advanced Engineering to build an open-source EV platform.

Though some might see the relaunch of the DeLorean's retro stylings as a cynical cash grab in the wake of Tesla's Cybertruck upcoming launch, others might argue that pop culture clout could provide the added incentive some need to finally go electric.



We will again have a face to face club meeting in March. 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.



MONDAY

1730 ARC	147.030 + Receiver sites and tor	ne info http://www.qsl.net/wd4scd/	St Pete Yacht Club
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
TUES	SDAY		
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
SATU	URDAY		
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
SUNI	DAY		
		da Traders Net non-	affiliated
0800		da Traders Net non- St Pete ARC daily net	affiliated from St Petersburg
0800 1830	3.933 Florid		
0800 1830 1930	3.933 Florid 147.060 no tone	St Pete ARC daily net	from St Petersburg
0800 1830 1930 2000	3.933 Florid 147.060 no tone NI4CE system	St Pete ARC daily net WCF Section Net	from St Petersburg NI4CE system
0800 1830 1930 2000 2030	3.933 Florid 147.060 no tone NI4CE system 147.550 simplex	St Pete ARC daily net WCF Section Net 550 Simplex Net	from St Petersburg NI4CE system Pinellas County

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,



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://arrlwcf.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, 3rd 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