

News from



The GLORIOUS SOCIETY OF THE WORMHOLE

October 2022

Hello Worms

ADDED TODAY, Well stuff has changed since I wrote this. The obvious is Ian ... the hurricane, not W4RIRalthough that Ian figures in my next news. Anyway I hope all the Worms, family and homes all weathered the storm. I spent three days in the Tampa EOC then Friday morning in the last special needs shelter. Then worked the American Victory haunted ship Friday night. Looking forward to Sunday football.

In club news Ian, the W4RIR version, finally got control of the website! He has now passed it off to Mike KV0OOM. Turns out Mike does not like Wordpress which is what the Wormhole website is. I know nothing about that stuff but Mike has agreed to continue as Webmaster but not liking it, thank you Mike.

Now back to what was written what seems like a decade ago. I am not gonna edit it to bring it up to date, just ignore whatever is out of date.

The latest on the website access: Linda, Mike's wife and Ian are working with GoDaddy to gain access. Every time they do all that GoDaddy asks for GoDaddy asks for more or the same thing in a different way. They are working it and hopefully it will happen. Related to that Mike KV0OOM has volunteered to take over as webmaster as long as it stays uncomplicated meaning not taking up a all of his time. Thank you Mike!

We also do not have access to the Wormhole MailChimp mailing list yet and I have little hope of getting it. My newsletter mailing list is progressing along and I should have almost everyone who was getting it on the list soon.

ICOM has a new radio coming out which looks intriguing but something no one I know would ever need most of. The IC-903 is a 144 MHz, 440MHZ, 1200MHz, 2400MHz, 5600MHz and

10GHz radio. It does a few digital modes including CW. I find no price yet. An interesting design to reduce coax loss with the radio actually being waterproof to mount directly under the antenna and the control head connected with an ethernet cable and powering the radio using PoE. I see the DXEngineering website has it listed as IN STIOCK but no price and they are selling the RESERVATIONS for \$35 so I guess they really don't have it yet.

In October we will meet face to face for those who wish to do so. If Alan is in attendance or we meet inside, we will broadcast the meeting on the repeater and Zoom 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 in front 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. Double parking is fine since we will be able to find the owner to move his vehicle if necessary. Below is the Zoom information. I only have one Zoom meeting I use for everything, same link and same passcode as every month;-)

Topic: Bill Williams' Zoom Meeting

Time: This is a recurring meeting Meet anytime

Join Zoom Meeting

https://zoom.us/i/2737114584?pwd=d1BETHVOQ21vWWZXZ0IYQ0FlWWtIdz09

Meeting ID: 273 711 4584

Passcode: worm

We currently have two net controls but would like three or four. If you are interested in being a net control station for once or twice a month let me or Dee or George know. You can talk to them on the weekly net.

BRING YOUR CHAIR your coffee and lunch! There are a few picnic benches if you do not have a folding chair but they are not comfortable for most of us. 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. We will meet inside is the weather is or looks like it will be bad.

COMPUTER SCAM ON WALMART WEBSITE

INFOPACKETS by John Lister

Walmart has stopped offering a 30TB portable hard drive that was listed on its website for \$39. The third-party listing was not an unbelievable bargain but rather an audaciously cheeky scam.

The supposed solid state drive (SSD) was listed on WalMart's site but sold and shipped by a third party. One security researcher found the same item from the same seller at the Chinese-base Ali Express for \$31.40.

Those familiar with the SSD market would recognize straight away that this was, to say the least, an implausible price. Most externals SSD ranges designed for the consumer market top out at 4TB, and getting 32TB of storage would cost several thousand dollars. Getting 32TB on a single drive is usually only available on an internal model, again costing well into four figures.

The security researcher who spotted the supposed bargain was unconvinced, but decided to order one just to see how much effort the scammers had put into it. They had taken a few steps to try to delay the customer from realizing all was not what they'd seen, perhaps to try to create a delay before the inevitable refund request.

It turns out the drive casing simply housed two 512MB Flash drives, the same hardware inside what many people call a "USB memory stick." The firmware on the drives was hacked to falsely report to Windows that each had a capacity of 15TB. (Source: pcworld.com)

As the researcher noted, this was a giveaway in itself because most storage devices list capacity in gigabits while Windows uses capacity in gigabytes. That means Windows would list a real 15TB drive as having a capacity of a lower figures such as 14.89TB.

(Source: arstechnica.com)

The other part of the scam was that the drive was programmed to produce a fake file directory listing that appeared to show every file the user had ever copied to it and not yet deleted.

In reality, once the drive was full, it simply wrote over the existing data. The fake directory listing would fool the user until they tried to open one of the files - only to find out that it was no longer there or corrupt. That could be many months if they were using the drive as a backup.

USER AGREEMENTS YOU'VE PROBABLY ACCEPTED

How many user agreements have you clicked through in your life without reading them? We're going to guess it's one for every single piece of software you've ever used, and every gadget, and Lord knows what else. You've probably signed off on *thousands* of pages of dense, unread legal jargon in your life. Well, guess what, you've all but signed away your soul.

We're *not* saying that the below companies intend to screw you over. All we're saying is that their legal teams have gone to great lengths to reserve the right to ... and to make sure you can't do a damned thing about it

So you just had a great weekend with your friends, and you decide to upload the pictures to your Flickr, Twitpic, Instagram and other sites that allow instantaneous uploading and incessant Internet exhibitionism. Who wouldn't? That's what's so great about social networking. It's the perfect way to share your precious memories with only those friends and family members you deem close enou- holy shit, how did your face end up in a penis enlargement ad? Because you didn't read the terms of service you agreed to when you joined those sites, that's how.

At some point (most likely the second the idea of social networking popped into someone's head), it was noted that people's personal photos amounted to a virtually unlimited supply of content that could be exploited by advertisers. As a result, pretty much every social network has a clause written into their user agreements that allows them to use your pictures for commercial purposes.

Specifically, the stipulations you agreed to state that you're granting these companies "worldwide, non-exclusive, royalty-free, sublicenseable and transferable license to use, reproduce or distribute" your private photos. But they do make it a point to clarify that you still own anything you upload. Of course, that doesn't mean you're going to see a dime when they use that picture of you on the beach last summer in one of those "Obey this one rule for a flat stomach!" ads (and not in the good way, Flabby). But still, you totally own that picture. Meaning they won't sue you if you use it elsewhere. See? What are you worried about? And after all, just deleting your photos off the respective sites should take care of the privacy and copyright issues, right? Well ... not exactly. There's also a section in those user agreements that states they can keep the rights to those removed images until a commercially reasonable time has passed.

But remember, you always have choices. You could decide to just not use these services. But then how will everyone know what the food you just ate looked like?

If there is one thing everyone knows about buying games, music and movies online, it's that we're basically doing the entertainment industry a favor by paying for that shit at all. We could just as easily download whatever we want for free, with minimal fear of legal repercussions.

And, if there is one thing everyone knows about buying things in general, it's that once you pay, you own it. That's what "purchasing" means. It's not like some car that you fail to make

payments on -- they can't come and repossess your purchases just because they changed their mind.

Well, not so fast. You should probably do a little more reading when that user agreement at your favorite online store pops up. In a nutshell, a lot of these sites have a section in their terms that says they reserve the right to change, suspend or fully remove any product or content that they choose. And they don't mean remove it from their site so nobody else can buy it; they mean remove it from the device you downloaded the file to, never to be seen again. Like if one day Bruce Willis strolled into your house and grabbed all of your *Die Hard* DVDs and then smashed his way out through your window.

What many people don't realize about buying digital files online is that you aren't really buying the file; you're just buying a license to use it. Such as video games. The wording from the Steam download services says that paying full price for a game grants ... "... a limited, terminable, non-exclusive license and right to use the Software for your personal use in accordance with this Agreement and the Subscription Terms. The Software is licensed, not sold. Your license confers no title or ownership in the Software."

That wording is standard -- you find the same in competing download services like <u>EA Origin</u>. If you are playing a game that requires access to the service and they decide to ban you from using it, your ability to play that game is gone and they don't have to offer a refund (or as they put it, "No refund will be granted, no Entitlements will be credited to you or converted to cash or other forms of reimbursement, and you will have no further access to your Account or Entitlements associated with your Account or the particular EA Service").

OK, but these are games that have multiplayer elements or other features that require the online service to work. Maybe it's just that they can't ban you from the service without disabling your game, so the disabling of the game is just a side effect they can't avoid. But surely that's not the case with, say, e-books, right?

Yep. In one recent case, a man <u>had his entire Amazon Kindle library deleted</u>. And for what crime, you ask? Simply because Amazon suspected that a third party may have unlawfully accessed his account. Unfortunately, that man had been a customer for eight years and had spent hundreds of dollars on Kindle books (that he also took the time to highlight and add notes to) that were now gone. Oh, and for good measure, they deleted his entire Amazon account as well, which in turn deleted his purchase history, wish list and shipping addresses. Not to mention any sassy reviews he might have posted for products he didn't like.

Kindle users were equally surprised when <u>they found that Amazon had remotely zapped their</u> <u>copies of George Orwell's 1984</u> after Amazon decided that they had been sold by mistake.

Remember when that sort of thing was the *company's* problem, and that all they could do was, you know, stop selling them? Not any more!

Of course, don't take this warning to mean that we're endorsing the idea of you ever leaving the house to buy things again. We're just saying be careful who you share your stuff with.

We've gotten spoiled by personal computers; they'll do pretty much any damned thing you tell them to do, that's the whole fun of having one. With a PC, fiddle with the code a bit and you can play a version of *Skyrim* where all of the characters are nude (Google it!). Computers are like cars -- you're free to customize and tweak to your heart's content. So when smartphones came along, the geekier ones among us wanted to do the same thing -- get creative and customize them in some way the manufacturer could never have imagined.

With phones, the practice is often referred to as <u>jailbreaking</u>, and a ruling by the U.S. copyright regulators <u>made doing it perfectly legal</u>. But much like Rollerblading or wearing skinny jeans, the fact that it's legal doesn't make it a great idea. Most companies have paragraphs in their terms of service that say you promise not to mess with the software. If they find out you did, you have effectively given them the right to unleash hell.

For instance, Nintendo, after realizing people were installing software to pirate games on the Wii, released an update that would brick the system upon installation. Microsoft, meanwhile, will merely permanently ban your console from connecting to the Internet if it finds any modifications done to the system. Now, not only can you not use any of your multiplayer games or the XBox Live download service (which is most of the machine's functionality these days), but you'll be forced to go around the neighborhood and pay 12-year-old kids to scream racial slurs at you in person.

You'll find almost identical "We can remotely kill your gadget" clauses in everything from e-readers to smartphones to portable gaming systems. It's kind of like if every car came with a device that, if it ever detected you speeding, would eject the engine through the hood.

OnStar is that incredibly convenient product many drivers would literally be lost without. Its automatic crash-response system, stolen vehicle tracking and roadside assistance are just some of the features that make this system so popular. In fact, they field over 15,000 lifesaving calls per year. They're like guardian angels of the highway. So what could they possibly be doing that's so terrible?

How about the fact that it's legally spying on everything you do? And it's a damned tattletale.

First of all, just for OnStar to do what it advertises, it has to include a machine inside your car that tracks your every move. It knows where you're going, how fast you got there and can, at

an instant, connect you to someone who can relay all of this back to you. In the hands of a less trustworthy company, it could amount to installing a slightly more helpful version of Big Brother right in your car's rearview mirror.

And guess what? As it turns out, OnStar is that less trustworthy company! They recently updated their terms of use contract to include two new points. First off, a new agreement forces you to allow OnStar to sell your driving data to whomever they want. We're talking stuff like vehicle speed and location, current odometer reading, driver seat-belt use and air-bag deployment. If that doesn't sound too bad, wait until they sell it to your insurance company, Speedy.

There's also a fine chance that, much like the GPS company TomTom, they could <u>receive a subpoena ordering them to release your data to the police</u>. And since we're talking about technology that can basically record everything you do and say inside your vehicle, OnStar offers so much more information than your typical GPS. In other words, if you're fleeing from justice, don't do it in a newer vehicle.

And all of that terrible stuff is just covered in the *first* update to their terms of service. Things get even more police-state-like with <u>the second update</u>. See, even if you decide that having a set of eyes monitoring you from inside your vehicle and waiting to tell the feds every time you send a text message at a red light is more than you're willing to put up with, it might be too late to do anything about it. Because that second update basically states that, even if you cancel your OnStar service, they'll still probably go ahead and *keep watching you*.

A forensic scientist <u>recently canceled the service</u> and found it extremely difficult to sever the data link between his vehicle and the OnStar headquarters. And that guy is a scientist! Regular people would probably have better luck just driving their car straight off a cliff than trying to figure that shit out.

So before you click "I Agree," make sure you've got nothing to hide. Because you are being watched.

RESONANCE IN A PARALLEL CIRCUIT

Ralph WD0EJA

The last article described a Series Resonant circuit. At resonance the voltages across the inductor (L) and capacitor (C) cancelled. This caused the voltage to be minimum and the current maximum. At resonance the series resonant circuit dissipates maximum power.

The parallel resonant circuit reacts opposite of the series circuit.

When a variable frequency source of constant voltage is applied to a parallel circuit there is a resonance affect similar to the that in a series circuit. However, in this case the applied current is smallest at the frequency for which the inductive (X_L) and capacitive (X_C) reactance are equal (or resonant). At that frequency the current through L is exactly cancelled by the out of phase current through C, so that only a current taken by a resistance (R) flows in the line. R is normally quite high in a parallel circuit.

At frequencies below resonance the current through L is larger than that through C, because the reactance of L is smaller and that of C higher at low frequencies. At frequencies above resonance the reverse is true.

Where is the parallel resonant circuit used?

In our radio equipment it is used where a high resistance is needed at resonance. Such as the input and output of an amplifier stage. To block a specific frequency from affecting a circuit.

What about an antenna?

Most antennas are series resonant circuits. However, not all are. There are a variety of loop antennas. Some small and some very large. In either case the impedance of the antenna at resonance looks like a pure resistor, but with a maximum value. It can be in the thousands of ohms.

This condition does not directly match the 50 ohms of our radios. Therefore, a matching circuit is needed to use it as an antenna. Since the parallel or loop type antennas operate at maximum voltage, losses can be incurred easily. If you are aware of this, the loss may be avoided.

Another common area that the parallel resonant circuit is used is in our series resonant antennas. "Traps". Multi-band antennas can use a parallel resonant circuit at a specific distance in the dipole or vertical to block a frequency. Usually the one you want to use. This makes the antenna look shorter for that frequency electrically.

The series and parallel resonant circuits give us a variety of ways we can use resonant circuits in our equipment and antennas.

73, Ralph WD0EJA BILAL COMPANY wd0eja@isotronantennas.com

MAN BUILD HIS OWN BROADBAND NETWORK

A man who built his own broadband network because he couldn't afford a commercial service has got a \$2.6 million government deal to serve other households. Jared Mauch took the drastic step after Comcast asked for \$50,000 to connect his rural Michigan home.

Mauch had been on a 1.5 Mbps phone line connection since 2002, a speed that was no longer sufficient for his needs. He had switched to a wireless service in frustration before asking Comcast to extends its network to cover his home.

He told Arstechnica that he would have paid as much as \$10,000 for the connection but could not afford the \$50,000 it asked for. Instead, he took advantage of the fact he is a network architect and built his own local network. It cost around \$145,000 to create, the bulk of which went on physically installing the cables. The network includes two miles of cabling to connect the area to the nearest commercial network provider.

As of January last year he had signed up 40 neighbors to his service, roughly 70 percent of the homes in the area his network covered. Many paid \$5,000 up front to help fund the network - however, that also counted toward credit for future service, which costs between \$65 and \$99 a month depending on speed.

Despite being a comparatively tiny communications business Mauch has now successfully bid for a project run by his county using money from a federal fund to expand broadband to regional areas. In return for the cash, he's required to offer service to 417 addresses. The funding will help cover the fact that some addresses will require as much as half a mile of cabling, costing more than \$30,000 to install. Mauch notes the price of the cabling itself has more than doubled in the past couple of years.

The contract also means Mauch will offer more favorable rates than he charges for his original network. New customers will pay either \$55 for 100 Mbps or \$79 for 1Gbps. Unlike some rural broadband, there will be no data use limits.

THE STARLINK INCIDENT

spaceweather.com

A minor geomagnetic storm is supposed to be *minor*. That's why even experts were surprised on Feb. 4, 2022, when dozens of Starlink satellites started falling out of the sky. A weak CME had hit Earth's magnetic field, and the resulting <u>G1</u>-class (minor) storm was bringing them down:

How could this happen? A new paper published in the research journal *Space Weather* provides the answer. "Although it was only 'minor,' the storm pumped almost 1200 gigawatts of energy into Earth's atmosphere," explains lead author Tong Dang of the University of Science and Technology of China. "This extra energy heated Earth's upper atmosphere and sharply increased aerodynamic drag on the satellites."

SpaceX launched the satellites from Cape Canaveral on Feb. 3, 2022. Forty-nine (49) Starlinks were crowded inside the Falcon 9 rocket; less than a quarter would survive.

As was SpaceX's practice at the time, the satellites were deployed at an altitude of 210 km-their first stop en route to an operational altitude near 600 km. In the satellite business, 210 km is considered to be low, barely above the atmosphere. SpaceX starts there in case any satellite malfunctions after launch. From 210 km, a "bad sat" can be easily de-orbited. A little too easily, as it turns out.

Using a physics-based computer model named "<u>TIEGCM</u>," Dang and colleagues simulated conditions during the storm. As geomagnetic energy heated Earth's atmosphere, the air density at 210 km increased globally by 20% with "hot spots" as high as 60%. This movie shows what happened:

Starlink dodged the worst spots. "The satellites did not hit any of the 60% regions," says Dang. "But that didn't save them." The weaker 20% enhancements were enough to bring down 38 out of 49 satellites.

To prevent a repeat, SpaceX has started launching to 320 km instead of 210 km. Earth's atmosphere has to reach that much higher to drag the satellites back during a geomagnetic storm. Since the change, more than 1200 additional Starlink satellites have been launched on 24 rockets without incident.

There's still danger, though. "Air density at 320 km is an order of magnitude less (compared to 210 km), but it's not completely safe," cautions Dang's co-author Jiuhou Lei, also from the University of Science and Technology of China. "During an extreme geomagnetic storm, density could increase from 200% to 800% even at these higher altitudes."

Extreme storms may be in the offing. Young Solar Cycle 25 is just getting started. The profusion of minor storms we are observing today will intensify in the years ahead especially as we approach Solar Max around 2025.

CLUB MEETING

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

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	Γuesday monthly, Hillsborough Co AF	RES 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/remino	der.html
0000-2359 HF Winlink THURSDAY	•	der.html
	•	der.html North Tampa
THURSDAY	https://winlinkwednesday.net/remino	
THURSDAY 1800 146.52 simplex	https://winlinkwednesday.net/remino	North Tampa
THURSDAY 1800 146.52 simplex 1830 147.060 no tone	https://winlinkwednesday.net/remino Hillsborough ARES/RACES St Pete ARC daily net	North Tampa from St Petersburg
THURSDAY 1800 146.52 simplex 1830 147.060 no tone 1900 444.750 +146.2	https://winlinkwednesday.net/remino Hillsborough ARES/RACES St Pete ARC daily net Fusion net	North Tampa from St Petersburg from Tampa
THURSDAY 1800 146.52 simplex 1830 147.060 no tone 1900 444.750 +146.2 1915 224.660- no tone	https://winlinkwednesday.net/remino Hillsborough ARES/RACES St Pete ARC daily net Fusion net St Pete ARC	North Tampa from St Petersburg from Tampa from St Petersburg
THURSDAY 1800 146.52 simplex 1830 147.060 no tone 1900 444.750 +146.2 1915 224.660- no tone 1930 146.6385 -127.3	https://winlinkwednesday.net/remino Hillsborough ARES/RACES St Pete ARC daily net Fusion net St Pete ARC Lakeland ARC	North Tampa from St Petersburg from Tampa from St Petersburg from Lakeland
THURSDAY 1800 146.52 simplex 1830 147.060 no tone 1900 444.750 +146.2 1915 224.660- no tone 1930 146.6385 -127.3 1930 444.225 + 146.2	https://winlinkwednesday.net/remino Hillsborough ARES/RACES St Pete ARC daily net Fusion net St Pete ARC Lakeland ARC Hillsborough ARES/RACES	North Tampa from St Petersburg from Tampa from St Petersburg from Lakeland from Tampa

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					
SUNDAY 0800 3.933	Florida Traders Net	non-affiliated			
	Florida Traders Net St Pete ARC daily net	non-affiliated from St Petersburg			
0800 3.933					
0800 3.933 1830 147.060 no tone	St Pete ARC daily net	from St Petersburg			
0800 3.933 1830 147.060 no tone 1930 NI4CE system	St Pete ARC daily net WCF Section Net	from St Petersburg NI4CE system			

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. If you want to see anything here and you are coming to the meeting let the seller know, maybe he can bring it.

FOR SALE,

See Bill AG4QX for the following: most from SK estate, make me an offer.

- *Yaesu-Musen FRG-7 Receiver \$100 looks rough
- *Swan 750CW Transceiver with 117x power supply and cables, looks rough \$200
- *Heathkit HW-101 Transceiver \$150 was his primary radio, looks rough
- *Heathkit HD-1250 Solid State Dip Meter \$35 with all coils in case
- *Heathkit HD-1215 Phone patch \$15 looks ok
- *Drake WV-5 wattmeter \$100 looks ok
- *Radio Shack 10A power supply 22-506 \$40 (looks new)
- *Astron RS-12A 12A power supply \$35 looks ok
- *EICO 482 scope \$125 works (looks good)

This stuff if from Ray KD4HUW

- *Yaesu ft-1000MP (100 watt) \$775.00
- * Icom AH-4 antenna tuner \$175.00
- *MFJ-616 Speech Intelligibility Enhancer \$90.00

Dean W8IM wants to make room in his cloet 352-255-1431, w8im @arrl.net or the Wormhole and SPARC nets

*Little used, original owner AnySecu TM218 144/220 transceiver, runs 10-15 watts, with original box, worthless Chinese manual, but most importantly RT software for it to make programming easy. \$35.00. Radio of course is already programmed for local repeaters.

*Meade 2080AT -LNT refracting telescope, little used original owner, original box, tripod, manual, some extra lenses, complete. \$100.00.



2022

- October 10 New Port Richey, Gulf Coast Amateur Radio Hamfest, Millennium
 Academy, 10005 Ridge Rd., website does not come up, contact Dennis
 Hammond K8DLH at 352-631-2308 or dennishammond506@yahoo.com
- October 15 Bradenton, 2nd Annual Manatee Amateur Radio Club Swapfest, 2113 Morgan Johnson Rd, Talk-In 146.820 100.0, info Michael Ryan, K4CVL ,941-376-6453, mryan5200@gmail.com, no info on website

November 5 Sarasota, SERC Hamfest, American RedCross, 2001 Cantu Ct, for info contact Gary Wells, Admission \$5, selling inside \$15, tailgate \$5, talk-in

146.73 – 100.0, WB9AYD, 941-549-1596, wb9ayd@arrl.net

November 12 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 or email kc1yl@yahoo.com

December 9 & 10 Plant City, the 2022 Tampa Bay Hamfest and West Central Florida

Section Convention, Friday and Saturday, at the Strawberry Festival grounds, admission \$10, 16x40ft tailgate space \$10, electric \$5, 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 ;-)

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

Late May Dayton Hamfest

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/

September Run for All Children's

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