

News from



The GLORIOUS SOCIETY OF THE WORMHOLE

May 2022

Hello Worms

In May we will 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. 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.

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

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

The 2022 Wormfest is coming up as always on the Saturday of Memorial Day weekend, the 28th this year. As in the past Covid years we will not be cooking or serving any open food items. No cover over the tables either so there really is no preparations needed for the hamfest. Bring your stuff to sell and your money to buy but mostly see those you talk to on the radio but rarely see.

The hamfest season has started, in addition to the Wormfest there are quite a few other hamfests in the listing below. Check it out.

* MARS INTEROPERABILITY EXERCISE MAY 3-7

ARRL Bulletin 15 ARLB015

From ARRL Headquarters

Newington CT May 2, 2022

To all radio amateurs

Radio Amateurs to Participate in MARS Interoperability Exercise in May

Members of the Military Auxiliary Radio System (MARS) will conduct an HF skills exercise from Monday night, May 2 through Saturday, May 7, 2022 to practice interoperability with the amateur radio community.

A 60-meter high-power broadcast will begin on May 3 at 0200 UTC followed by the FEMA region net. That will continue four more nights at 0200 UTC with the region net. At 1200 local each day (May 3 - 7; Eastern, Central, Mountain, and Pacific) the net will be called by region. See the AUXCOMM chart in PDF format available at, [//arrl.org/](http://arrl.org/).

MARS members will be reaching out to the amateur radio community via the 60-meters Channel 1 Net (5330.5 kHz). These are directed nets. The nets will be run by region. These are not typical "everyone check into the net" operations. Amateur operators who participate should listen first. Net control will ask for stations meeting specific criteria to check in, e.g., stations in a particular geographic area. Only stations that meet the criteria should check into the net.

In addition to 60 meters, MARS stations will also reach out on amateur frequencies such as 80-meter traffic nets and other bands they may be able to reach.

* Armed Forces Cross-Band Test May 14*

The US Department of Defense will host this year's Armed Forces Day (AFD) Cross-Band Test, Saturday, May 14, in recognition of Armed Forces Day on May 21. The event is open to all radio amateurs. For more than 50 years, military and amateur stations have taken part in this exercise, designed to include amateur radio and government radio operators alike.

The AFD Cross-Band Test is a unique opportunity to test two-way communications between military and amateur radio stations, as authorized under FCC Part 97 rules. These tests provide opportunities and challenges for radio operators to demonstrate individual technical skills in a tightly controlled exercise in which military stations will transmit on selected military frequencies and will announce the specific amateur radio frequencies being monitored.

The [schedule](#) of military/government stations taking part in the Armed Forces Day Cross-Band Test and information on the AFD message is available on the MARS website.

[Complete](#) the request form to obtain a QSL card.

BITRAT MALWARE AIMING AT WINDOWS 10 PIRATES

BLEEPINGCOMPUTER By Bill Toulas

A new BitRAT malware distribution campaign is underway, exploiting users looking to activate pirated Windows OS versions for free using unofficial Microsoft license activators.

BitRAT is a powerful remote access trojan sold on cybercrime forums and dark web markets for as low as \$20 (lifetime access) to any cybercriminal who wants it. As such, each buyer follows [their own approach](#) to malware distribution, ranging from phishing, watering holes, or trojanized software.

In a new BitRAT malware distribution campaign discovered by researchers at AhnLab, threat actors are distributing the malware as a Windows 10 Pro license activator on webhards. Webhards are online storage services popular in South Korea that have a steady influx of visitors from direct download links posted on social media platforms or Discord. Due to their wide use in the region, threat actors are now more commonly [using webhards to distribute malware](#).

The actor behind the new BitRAT campaign appears to be Korean based on some of the Korean characters in the code snippets and the manner of its distribution.

To properly use Windows 10, you need to purchase and activate a license with Microsoft. While there are [ways to get Windows 10 for free](#), you still need a valid Windows 7 license to get the

free upgrade. Those who do not want to deal with licensing issues or do not have a license to upgrade commonly turn to pirating Windows 10 and using unofficial activators, many of which contain malware.

In this campaign, the malicious file promoted as a Windows 10 activator is named 'W10DigitalActivation.exe' and features a simple GUI with a button to "Activate Windows 10." However, instead of activating the Windows license on the host system, the "activator" will download malware from a hardcoded command and control server operated by the threat actors. The fetched payload is BitRAT, installed in %TEMP% as 'Software_Reporter_Tool.exe' and added to the Startup folder. The downloader also adds exclusions for Windows Defender to ensure that BitRAT won't encounter detection issues. Once the malware installation process is completed, the downloader deletes itself from the system leaving behind only BitRAT.

BitRAT is promoted as a powerful, inexpensive, and versatile malware that can snatch a wide range of valuable information from the host, perform DDoS attacks, UAC bypass, etc.

BitRAT supports generic keylogging, clipboard monitoring, webcam access, audio recording, credential theft from web browsers, and XMRig coin mining functionality. Additionally, it offers remote control for Windows systems, hidden virtual network computing (hVNC), and reverse proxy through SOCKS4 and SOCKS5 (UDP). On that front, [ASEC's analysts](#) have found strong code similarities with [TinyNuke](#), and its derivative, AveMaria (Warzone). The hidden desktop feature on these RATs is so valuable that some hacking groups, like the Kimsuky, incorporated them in their arsenal just to use the hVNC tool.

Even if the legal and ethical aspects are ignored, using pirated software is always a security gamble. The more tools are used to activate illegally obtained copies of software or crack their intellectual property protection systems, the greater the chances of ending up with a nasty malware infection.

Those who can't afford to purchase a Windows license should look at alternative options instead, such as accepting the limitations of the free version, monitoring for special offers from trustworthy platforms, or using Linux.

Ultimately, users should not trust license activators and any unsigned executable authored and released by unknown vendors to run on your system.

***NEW WINDOWS 11 SECURITY FEATURE WILL REQUIRE YOU TO
RESET YOUR PC ***

One of the more useful upcoming features within Windows 11 carries with it a major pain point: you'll need to reset your PC to use it.

Security was arguably one of the fundamental reasons for launching Windows 11, as Windows 11's restrictive hardware requirements proved. And more are on their way. "In a future release of Windows 11 you're going to see significant security updates that add even more protection from the chip to the cloud by combining modern hardware and software," David Weston, vice president of OS security and enterprise at Microsoft, wrote in a blog post on Tuesday.

Microsoft held a "future of hybrid work" seminar on Tuesday, explaining how Microsoft's Windows 11 and its related technologies would benefit commercial customers and consumers alike. Microsoft announced its new security features alongside a tabbed File Explorer and other new upcoming Windows 11 features, plus specific enhancements for videoconferencing that include AI-generated Eye Contact.

One of those key features is Smart App Control, which Weston described as a "major enhancement to the Windows 11 security model." Simply put, Smart App Control uses similar techniques as SmartScreen, the protections Microsoft built into Edge, to protect your PC. While SmartScreen uses various signals to alert you that a website might attack your PC via malware or a phishing attack, Smart App Control is baked into the Windows 11 operating system to provide similar protections against malicious apps you may download without truly knowing if they're safe or not. Each new app that's run on Windows 11 is checked against this threat intelligence to determine if it will be potentially harmful or not.

Early Windows 11 adopters, however, will essentially be penalized. If you buy a new PC with Windows 11 pre-installed, Smart App Control will automatically be installed. Older devices won't. "Devices running previous versions of Windows 11 will have to be reset and have a clean installation of Windows 11 to take advantage of this feature," Weston wrote.

Microsoft has always said that its own Microsoft Store is vetted and will provide secure, trusted apps. But Windows has always allowed users to "sideload" third-party apps and games, and it's these apps, utilities, and games that Microsoft will more closely inspect.

Microsoft is also baking Microsoft Defender SmartScreen into the OS, which will help protect users from phishing attacks. Presumably, that protection would be available no matter which email client you use.

Microsoft will also add increased encryption on Windows 11 devices, though the company isn't making clear whether it will be reserved for Windows 11 Enterprise editions or Windows 11 as a whole. A new Personal Data Encryption feature accessible for applications and IT

departments will leave users' data encrypted when a user isn't signed in. Users must authenticate with Windows Hello for Business to access the data, linking data encryption keys with a user's passwordless credentials.

Finally, Microsoft is trying to promote Pluton, its security processor that it co-designed with AMD. So far, however, top laptop vendors are ignoring Pluton in favor of Intel's vPro technology.

THE BEST WAY TO OPERATE HF

Ralph WD0EJA

Last month mentioned HF reflection, ground absorption and a possible way of determining absorption.

The ground and height are not the only factors that affect HF radiation. Also the style of antenna.

A dipole design is known to have a gain of radiation broadside to the antenna and a loss toward the ends compared to the broadside. The predicted values may turn out to be quite different. If the dipole does not have sufficient height, then the predicted values can change. The antenna may become more omni-directional. In other words the expected pattern will radiate more uniformly as you check pattern around the antenna. This is noticeable with a yagi beam. It is built on a dipole design, however if not given sufficient height, will lose some of its gain and directivity.

The inverted V tends to be prone towards more of an omni-directional pattern. If set up properly, it will work well and evenly in all directions.

For both these antennas, the higher the better. This style is quite forgiving. At heights of 60 feet plus, it can be used for very short skip and moderately long skip, depending on time of day and season.

On reception, noise factors may reduce with more height above ground.

None of this is an exact science. HF radiation is a very sloppy radiation. It tends to do what it wants to do. It will go through objects that you think it would not. Like metal, concrete, wire mesh and so on.

At other times plywood will absorb the radiation. The above mentioned objects can do the same. You do not really know until the antenna is setup and tried.

One thing you can count on, HF rarely reflects. It will bend and it can induce in various objects. When it skips in the upper atmosphere, it is a refraction or a bending of a normally straight wave pattern. Reaching the ground it can skip again, but again, it is a refraction or bending of the wave.

Getting a good take off angle and efficient antenna system can be a challenge if you are cramping the antenna.

This is one advantage to the Isotron. I have to get a sales pitch in somewhere. It will allow you to have an efficient radiator, but giving you more distance from absorbing objects. It is easier to give it height when lateral space is limited.

Hopefully this information will give you an idea of why your station is working the way it is. Whether it is working great or not so good, hopefully it will help you to make changes that will enhance your performance.

73,

Ralph WD0EJA

BILAL COMPANY

wd0eja@isotronantennas.com



CLUB MEETING

We will again have a face to face club meeting in May. 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 Brandon
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

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

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 2022, 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> .

May 28

Dade City, EPARS Tailgate, Church Ave parking lot, 37444 Church Ave, across from the American Legion, admission \$5, tailgate \$10 (includes one ticket), license testing 0900, Talkin on 146.880 + 146.2, for more info contact Chris Bloxsom , AA4CB, P O Box 1292 San Antonio, FL 33576, 224-221-5064 or see the website at http://eparsonline.org/public_html/eparsonline.org/

June 4

Ocala, Silver Springs Radio Club Tailgate, Marion County Governmental Complex, 319 SE 26th Terrace, FREE, setup at 0800, open at 0900, no talk-in listed

June 11

Dade City, 3rd Annual Pre-Field Day Tailgate Gathering, 13642 21st Street South (SR52), **Talk-In** 147.135 + 146.2, for info contact Gary Mentro , N3OS at 813-713-9994 or n3os@arrl.net

August 20

TARCFest TARC Clubhouse, 7801 N 22nd St, \$5 entry includes tailgate, a few inside tables reserved in advance, talkin on 147.105 +146.2, more info at <http://hamclub.org/>

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 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/
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