

News from



The GLORIOUS SOCIETY OF THE WORMHOLE

May 2019

Hello Worms

Hello Worms, it's time for the May meeting already but your president will not make it. I will be driving a truck and running a rest stop for the MS150 bike ride. If you are gonna be there look me up. I'll be at rest stop Alpha both days but they are in different place on Saturday and Sunday. Our very capable Vice President will be running things so everybody play nice.

The 2019 edition of the Wormfest is only a couple weeks away, as always the Saturday of Memorial Day weekend, May 25th this year. Tell your friends!

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

*** CAN INDOOR ANTENNAS WORK? YES!***

By Dan Romanchik, KB6NU

Recently, a reader asked: I am studying your "No Nonsense" book as I prep for the Technician test. I am also learning CW. I am going to buy a Yaesu FT 450D as my first radio, and I want to use an indoor antenna as my first antenna. What do you recommend for CW?

I replied: To be honest, I've never had a lot of luck with indoor antennas. Don't let that dissuade you, though. I have worked many hams with indoor antennas. Just

recently, for example, I worked a guy who was using a [Buddipole](http://www.buddipole.com/) (http://www.buddipole.com/) inside his apartment.

If you have an attic, you could easily install a dipole up there. The [ARRL web page on indoor antennas](http://arrl.org/indoor-antennas) (http://arrl.org/indoor-antennas) notes: “Attics are great locations for indoor antennas. For example, you can install a wire dipole in almost any attic space. Don’t worry if you lack the room to run the dipole in a straight line. Bend the wires as much as necessary to make the dipole fit into the available space. “Ladder-line fed dipoles are ideal for attic use—assuming that you can route the ladder line to your radio without too much metal contact. In the case of the ladder-line dipole, just make it as long as possible and stuff it into your attic any way you can. Let your antenna tuner worry about getting the best SWR out of this system.”

There are plenty of remote tuners now, too. You could install a doublet with elements as long as you can make them, connect them directly to the remote tuner, and then run coax to your shack.

I have also worked guys who have used Slinky antennas inside a house. The advantage of using a Slinky is that it is electrically longer than a wire of the same length.

An attached garage might also make a good location for an indoor antenna. VE3SO, who I’ve worked several times, uses a [magnetic loop antenna installed in his garage](https://www.kb6nu.com/magnetic-loop-antenna-at-ve3so/) (https://www.kb6nu.com/magnetic-loop-antenna-at-ve3so/).

If you do a web search for “indoor amateur radio antennas,” you’ll get many more ideas. Here are a few that looked promising to me:

- [Indoor antenna for 7 Mhz](http://www.iw5edi.com/ham-radio/37/indoor-antenna-for-7-mhz) <http://www.iw5edi.com/ham-radio/37/indoor-antenna-for-7-mhz>
- [An Indoor Reduced Size Rectangular Loop](http://hamuniverse.com/kl7jrindoorloop4010.html) <http://hamuniverse.com/kl7jrindoorloop4010.html>

Another option might be to load up your gutters! I've worked a couple of guys who use gutter antennas, including [WA8KOO](https://www.kb6nu.com/operating-notes-gutter-antenna-rac-contest-161-countries-worked/) [https://www.kb6nu.com/operating-notes-gutter-antenna-rac-contest-161-countries-worked/](https://www.kb6nu.com/operating-notes-computer-virus-club-net-gutter-antenna/) and [K3DY](https://www.kb6nu.com/operating-notes-computer-virus-club-net-gutter-antenna/) <https://www.kb6nu.com/operating-notes-computer-virus-club-net-gutter-antenna/>.

This blog post garnered a couple of interesting comments. *K2MUN* wrote, "For many years I've used an attic mounted off-center fed 40 meter dipole. With an automatic antenna tuner and a 4:1 balun I've worked lots of dx with both qrp and, more easily, 100 watts! Certainly, outdoors is much superior but an attic is a nice location in bad weather making playing with your antenna a pleasure :-)."

John, KD0JPE, said, "If you have an attic available, check out the following 6-band coax trap-based antenna: <http://degood.org/coaxtrap/>. I constructed one of these 9 years ago and have had great results with it."

The bottom line is that indoor antennas can definitely work. They may take more work to put up than outside antennas, but as the saying goes, "Any antenna is better than no antenna."

Editor's note: Playing in the attic is never fun here and torture in summertime. But I know those who have used attic antennas and they are better than no antenna. Bill

* HONDA GENERATOR RECALL DUE TO FIRE AND BURN HAZARD*

Consumer Contact:

American Honda toll-free at 888-888-3139 from 8:30 a.m. to 7 p.m. ET Monday through Friday or online at <https://powerequipment.honda.com/> and click on "Recalls and Updates" at the bottom of the page for more information.

Recall Details

Description: This recall involves Honda EU2200i, EU2200i Companion and EB2200i portable generators. The recalled portable generators were sold with a red or Camo cover. The names "HONDA" and the generator model name are printed on the control panel. The serial number is located on a lower corner of one of the side panels

of the generator. The following model numbers and serial number ranges are being recalled:

Model	START SERIAL NUMBER	END SERIAL NUMBER
EB2200iTA	EAJT-1000001	EAJT-1005474
EU2200iTA EU2200iTA1 EU2200iTA2	EAMT-1000001	EAMT-1260796

Remedy: Consumers should immediately stop using the recalled generators and contact a local authorized Honda Power Equipment service dealer to schedule a free repair. Honda is contacting all known purchasers directly.

Incidents/Injuries: Honda has received 19 reports of fuel leaking from the fuel valve. No injuries have been reported.

Sold At: Authorized Honda Power Equipment Dealers and The Home Depot and other home improvement stores nationwide and online from February 2018 through February 2019 for about \$1,100 to \$1,300.

Manufacturer(s): Thai Honda, of Thailand

Importer(s): American Honda Motor Company Inc., of Torrance, Calif.

Manufactured In: Thailand

Recall number: 19-088

* ZENER DIODES*

Ralph WD0EJA, April 2019

The last article was about conventional diodes. There are many applications for various types of diodes. What they have in common are that they are made up of only two materials, a P (+) and a N (-) material. Depending on the composition, a diode can be made to do a variety of functions.

The Zener diode. These have been used for a long time. They are very effective in regulating voltage.

How does it work? Again, you can get as complicated as you want, but I am not up to that.

A diode allows current to flow in one direction only. A zener will do the same. However, if you use a zener in the reverse direction, it will not conduct current until you reach a specified voltage, then it will avalanche in conductivity. Therefore, If you have a zener rated at 7 volts. It will not conduct current until you reach 7 volts. It will maintain the 7 volts very steady.

This is also a reason zeners are rated not only in voltage, but wattage. When the zener conducts it cannot exceed the power of the diode. A 1 watt diode rated at 7 volts cannot exceed .14 amps. Therefore, your circuit design cannot exceed this current because the zener will offer close to a short (near 0 ohms) when regulating.

Zeners are available from 1/4 watt to 50 watts. They come in a large variety of voltages. You can use two in series to obtain a higher regulating voltage. If you have a 7 volt and a 5 volt in series, they can be used as a 12 volt regulator.

Keep in mind that zeners regulate by shorting the circuit. Therefore, the circuit design has to be able to handle the short and so does the zener.

Common applications are regulating biasing voltages for amplifiers. It is common to see zeners in linear amplifiers for regulating the needed bias.

Zeners can be used in voltage dividers, transient protection (spark plug noise) and RF clamping to prevent over load of a sensitive RF amplifier.

If you want to try out a zener or want to know the unknown value, it is quite easy. Connect a zener in series with a 1,000 ohm resistor. Apply a reverse bias. One lead to the zener and one to the resistor. Use a variable DC power supply. Measure the voltage across the zener only. You will see the voltage increase to the value of the zener and no more.

Zeners are a small inexpensive device with a large variety of applications.

73,

Ralph WD0EJA, **BILAL COMPANY**

*** SIX POPULAR ANDROID APPS BANNED ***

TECHSPOT, By [Isaiah Mayersen](#) on April 21, 2019

An investigation conducted by BuzzFeed in collaboration with Check Point, Method Media Intelligence and ESET security firms found that six apps published by DU Global were clicking on in-app ads to generate revenue illegally and without the user's knowledge. They also lied about their developer and country of origin, don't comply with GDPR regulation and ask for many dangerous permissions that are completely unnecessary to function. Combined, they have over 90 million downloads.

Most third-party apps rely on little banner ads that sit at the bottom of an app, while others sometimes have five-second full-screen ads. Generally, these ads are provided by Google or third party's ad services, which pays them a small amount for displaying the ad and a larger amount when a user clicks on the ad. All six of the apps found in the investigation would periodically click on the ads and open them in the background, whether the app was open or not, using up system resources, battery life, and data.

Needless to say, if you've downloaded any of them: Selfie Camera, Total Cleaner, Smart Cooler, RAM Master, AIO Flashlight and Omni Cleaner – **delete them** now. Thankfully Google removed them from the Play Store as soon as they were alerted.

Security researchers dived in deep into Selfie Camera, which has over 50 million downloads. In addition to the ad fraud, they found that the app also committed 'download fraud' where the app monitored the other apps on the phone. When a new app was downloaded, Selfie Camera uploaded information about the app and claimed that they caused it to be downloaded, tricking developers into paying them. It also contains code designed to monitor battery, monitor the CPU and to view external websites.

“We explicitly prohibit ad fraud and service abuse on Google Play. Developers are required to disclose the collection of personal data, and only use permissions that are needed to deliver the features within the app,” Google told [Buzzfeed](#). “If an app violates our policies, we take action that can include banning a developer from being able to publish on Play.”

In addition to those six major offenders, BuzzFeed also noticed some ugly behavior in three other apps. Emoji Flashlight, with 5 million downloads, requests thirty permissions including seven dangerous ones (as defined by Google). Other flashlight apps require just two. Samsung TV Remote Control, which is developed by Peel Technologies, requests 58 permissions including 23 dangerous ones. Its privacy policy also explicitly states that they may record and upload audio at any given time without notifying the user. Lastly, Chinese-language kid’s app WaWaYaYa sends emails, usernames, real names and device information back to servers in China with no form of encryption and security.

Dangerous and fraudulent apps are a shockingly widespread problem, and just because an app appears in the Play Store or App Store doesn’t mean it can be trusted. To check if an app is trustworthy, read a couple of reviews, read the privacy policy, and see if it’s from a developer you recognize or comes up in a Google search. And most importantly: don’t give an app permissions it doesn’t need.

- **WIFI AP LEAKS 2M PASSWORDS***

INFOPACKETS by John Lister on April, 24 2019

An app designed to make it easier to get on public WiFi has accidentally exposed more than two million WiFi passwords. It appears to be a case of terrible design, rather than pure malice by the app designers.

The app is called "WiFi Finder - connect to hotspots" and is listed on the Google Play store as having more than 100,000 downloads.

In theory the app is part of a project to make using WiFi on the move more convenient. It's designed to be a massive database to which users can add public WiFi networks and the relevant passwords.

For example, visitors to a coffee store could add the password to the database, regardless of whether or not the owners of the store wanted the WiFi password made publicly available. In principle it's no different than somebody telling a friend the password - just that it's done on a much larger scale.

The problem is that the database which powers the app turns out to be publicly available, most likely because the app developers didn't think the security through. To make things worse, the database lists not just the specific location and network names of each WiFi hotspot, but also the password in unencrypted text.

Security researcher Sanyam Jain worked with TechCrunch to examine the database and discovered that many of the networks were located in residential areas. That strongly suggested they were home WiFi networks, rather than ones which are designed to be accessible by customers of a store or the public in general. (Source: techcrunch.com)

It doesn't look like it's a case of people being dumb enough to intentionally and manually add their own network details and password to the hotspot database. Instead, users are offered the chance to simply upload all the saved network details on their device, which is then stored in the database.

It seems that most users assumed the app would be designed to filter the device WiFi list somehow and only add the details for networks that are designed to be partially or fully accessible to the public (such as coffee shops, for example). Unfortunately, that's not the case. (Source: gizmodo.com)

Users of the app can't escape the blame completely, however. The app not only requested permission to access the WiFi network details, but also a bunch of information that was in no way relevant or necessary to the app, including a request for the user's personal contact list.

CLUB MEETING

The next club meeting is May 4th. We meet on the first Saturday every month at 11:00 Saturday morning at the Minnreg Building located at 6340 126th Ave N, Largo. Members are welcome to come in the rear area through the fence gate on the southeast corner of the property. Talk-in is on the Wormhole repeater system. For those coming to the meeting who cannot hit our repeater we will be monitoring the Honeywell club repeater on 443.050 +141.3. We will keep an eye peeled for you. We will take advantage of the cooking facilities with an after-the-meeting Social and Wormdog picnic.

CLUB NETS

Check in on the club net Thursdays at 1930 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. We are always looking for volunteers to be the net control operator. Anyone interested, talk to one your club officers.

LOCAL NETS

MONDAY

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

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

1900 144.210 USB 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 28.450 WCF section 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	Tampa ARC net	from
2000 28.365 USB	simplex	Brandon ARS
2030 NI4CE system system	EAGLE Net, NTS traffic net	NI4CE
2100 28.465 USB	10/10 net	from Orlando
1900 146.490 simplex simplex Net	3 RD Tuesday monthly, Hillsborough Co ARES	

WEDNESDAY

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

THURSDAY

1800 146.52 simplex Tampa	Hillsborough ARES/RACES	North
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1830 147.060 no tone Petersburg	St Pete ARC daily net	from St
1900 444.750 +146.2 Tampa	Fusion net	from
1915 224.660- no tone Petersburg	St Pete ARC	from St
1930 146.6385 -127.3 Lakeland	Lakeland ARC	from
1930 440.100 + 162.2 Tampa	Hillsborough ARES/RACES	from
1930 146.850- 146.2 Petersburg	Wormhole	from St
2000 53.150 -1MHz 146.2 Petersburg	Wormhole	from St
2030 NI4CE system system	EAGLE Net, NTS traffic net	NI4CE
FRIDAY		
1830 147.060 no tone Petersburg	St Pete ARC daily net	from St
2030 NI4CE system system	EAGLE Net, NTS traffic net	NI4CE
SATURDAY		
0730 3.940 (7.281 Alt.)+/- QRM WCF	WCF Section HF Net	from
1830 147.060 no tone Petersburg	St Pete ARC daily net	from St
2030 NI4CE system system	EAGLE Net, NTS traffic net	NI4CE

SUNDAY

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

FOR SALE / WANTED

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

FOR SALE, Mosley TA-33M 10-15-20M beam with the 40M add on kit. Antenna is on the ground and in good shape. There are several parts that need replacement. The 40M kit is new in box. Antenna is broken down into six or seven feet sections so easy to handle. Asking \$300, talk to me, Bill AG4QX at arrl dot net or see me at the meeting.

FOR SALE, Cushcraft A4S 10-15-20M beam, on the ground. There are several parts that need replacement. Asking \$250, talk to me, Bill AG4QX at arrl dot net or see me at the meeting.

HAMFESTS

2019

May 11 Dade City, East Pasco ARS, 37745 Church Ave, \$5 entry and tailgate, info at http://eparsonline.org/public_html/eparsonline.org/

May 25 **WormFest 2019, Pinellas Park, FREE, Freedom Lake Park, 9990 46th St N, southeast corner of US 19 and 49th Street, Park opens at sunrise for vendor setup, hamfest starts at 0800. Talk-in on 146.850 - 146.2. For a map and directions see <http://www.TheWormholeSociety.org> .**

August 17 **TARCFest, TARC Clubhouse, 22nd St at the river, \$ entry plus \$ to tailgate, inside tables \$ in advance, talkin on 147.105 +146.2, more info at <http://hamclub.org/>**

November 9 Pinellas Park, **SPARCFest**, admission FREE, tailgate free, Freedom Lake Park, 9990 46th St N, Southeast corner of US 19 and 49th Street, Talk-in on 147.060+ no tone. VE testing at 0900. For more information go to <http://www.sparc-club.org/sparcfest.html>

December 13 & 14 **Plant City, the 2018 Tampa Bay Hamfest is the West Central Florida Section Convention, Friday and Saturday, at the Expo Building in the Strawberry Festival grounds, advanced admission \$9, at the door \$10, for information contact Bill Williams AG4QX, chairman@fgcarc.org or go to <http://www.tampabayhamfest.org> or you can just ask me, Jim or Dee at a meeting ;-)**

2020

February 7-9 **Orlando Hamcation and State Convention, Central Florida Fairgrounds, 4603 West Colonial Drive, Tickets \$15 in advance, \$17 at door. Talkin 146.4760 - no PL or D-Star 146.850 -, all the information at www.hamcation.com or call 407-841-0874**

February 21 & 22 Tampa, **5th Annual TECHCON Convention**, for more info
<http://arrlwcf.org/> or contact Darrell Davis at kt4wx@arrl.net.

Mid January	Frogman swim in Tampa Bay. http://www.tampabayfrogman.com/
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/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
Early to Mid May	MS 150 Citrus Tour bike ride http://www.citrustour.org/register.php
Mid-May	Annual Armed Forces Crossband Test
Mid-May	Florida Hurricane Exercise
May, Memorial Day Weekend	Wormfest
Early June	Museum Ships on the Air
Fourth weekend in June	Field Day http://www.arrl.org/contests/announcements/fd/
July 3/4	Midnight Run in Largo http://www.kiwanismidnightrun.com/
August	International Lighthouse/Lightship Week https://illw.net/
October, 3 rd weekend	JOTA, Scout Jamboree-on-the-AIR (around 14.280MHz)
Early December	ALS bike ride in Walsingham Park

December, 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 repeaters are both now dual mode Yaesu DR-1X. FM analog as always and now Yaesu Fusion, a C4FM/FM 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