



News from

## The GLORIOUS SOCIETY OF THE WORMHOLE

August 2023

### Hello Worms

This has been a bad few weeks for the Worms. I just got word that John Schatmeyer KK4AXF passed in May. His ashes were scattered at sea in a private ceremony per his wishes. We are looking for a good photo of John.

I sent out an email after the July Wormhole newsletter went out about Bob Maus KJ4RMX who died on June 10 and the service plans. We have them both in our thoughts, they will be missed.

During the August meeting we will have a short presentation by EdPearson about building a simple dual band HF vertical antenna that does not need a ground plane. We will broadcast the meeting on the repeater and Zoom video. It appears that the Chamber of Commerce has a Zoom account because it did not time out for the July meeting. I am moving the directions to the meeting place and Zoom to the end of the newsletter, you all have seen them enough.

I remind all that the Vice President position is open. Also Mike would love it if someone would take over the website. If interested in either let me know.

We will have donuts, water and soft drinks (probably only root beer). Bring, your coffee and lunch if you want! We will not be cooking but we have access to the Chamber of Commerce kitchen which has a microwave and a toaster oven so you can heat up/cook what you bring.

It has been a long time since I checked the Net Listing in this Newsletter. Please take a look at it and let me know if I need to make any corrections, deletions or additions.

**\*RADIO AMATEURS HACK A NASA SPACECRAFT\***

Spaceweather.com

Ham radio operators are picking up a strong signal from space. It's NASA's STEREO-A spacecraft returning home after 17 years.

"I'm having fun with STEREO-A," reports Scott Tilley (VE7TIL) of Roberts Creek, British Columbia. "The spacecraft is coming close to Earth this summer, and I can now receive its signal using a small [26-inch dish](#) in my backyard.

On July 2<sup>nd</sup> we caught an X-flare in progress. Tilley says. "Naked-eye sunspot AR3354 was really crackling.

STEREO-A left Earth on Oct. 26, 2006, launched from Cape Canaveral with its sister ship STEREO-B. Both spacecraft were on a mission to the farside of the sun. Over the years, they would circle behind the sun, beaming images back to Earth so scientists could make 3D models of solar activity. In 2014, STEREO-B failed and was not heard from again. STEREO-A kept going, and now it is on its way back.

Earlier this summer, Tilley began hearing rumors that other radio operators were picking up signals from STEREO-A at 8443.580 MHz. He decided to check it out. "The central carrier is very loud, almost 30dB above the noise," he says. "I also noticed data sidebands, which are unusual to see on such a distant object for my small antenna.

At first, the signal was indecipherable. But Tilley found lots of information about its format posted by NASA on public websites; it wasn't a secret. Using a program called "SatDump" written by Alan Antoine (F4LAU), he successfully demodulated the data. Now Tilley is monitoring data streams from almost all of STEREO-A's science instruments including its extreme ultraviolet imager (EUVI), two coronagraphs (COR1 and COR2), the heliospheric imager (HI) and a solar radio burst receiver (S/WAVES).

At closest approach on August 17th, STEREO-A will be only 0.05 AU (7.5 million km) from Earth. By then, signals from the spacecraft will have more than doubled in strength, making it even easier to "hack.

"What started out as a passing curiosity is now turning into a summer pastime," says Tilley. "This is a unique time to play with STEREO-A."

Hams, would *you* like to monitor STEREO-A? A technical blog post just published by Tilley explains exactly [how to do it](#).

For a few pictures/charts see the article at: <https://spaceweather.com/>

## **\* REDUCING RECEPTION NOISE \***

Ralph WD0EJA

The last article described how to build a ferrite loop antenna. It has bi-directivity, so it can be used for locating sources of unwanted noise.

The ferrite rods have an interesting characteristic that makes it look like a much larger antenna. In free space it bends the electro-magnet lines into the ferrite rod. This enhances more signal into the rod than a metal antenna. This allows the ferrite antenna to receive signals at an acceptable level. It normally will not receive like the full size resonant antenna, but it is enough to take advantage of the other features.

The ferrite antenna needs to be resonated on the band you are using. Signal or noise will maximize at this point. It will have a bi-directional response. Also, a bi-directional null. This null reduces unwanted noise in two directions. In the opposite two directions it literally pulls in signal.

Now is where you can use your imagination. The antenna should be outdoors as high and in the clear as possible. Many transceivers have two separate antenna ports. An antenna switch will also work. The antenna is small and light, but it needs to be rotated at least 180 degrees. A small gear reduce motor is sufficient to handle the light load.

Depending how you build the antenna, it may need to be tuned to the frequency you are using.

When you switch from your main antenna to the ferrite, you may notice a drop in reception even at the peak point. This can be compensated for with your receiver pre-amps. External amps could be added also. However, in many cases you will hear the target station clearer.

In our noisy world, it is good to have an option to reduce the various interferences.

73,  
Ralph WD0EJA  
BILAL COMPANY

## **\*IS THE HEAT GETTING TO YOU? \***

QRZ News VU3HZW

The National Centre for Polar and Ocean Research (an autonomous institution under the Ministry of Earth Sciences, Government of India) is currently accepting applications for the 43rd Indian Scientific Expedition to Antarctica. In the previous expedition ([42-ISEA](#)), [Sarabjeet Singh Chhabra, an Amateur Radio Operator with the call sign VU2CUW](#), was chosen as the Radio Operator. For the upcoming expedition (43rd ISEA), three amateurs will be included in the team. Contract wages of ₹ 54,741/- (fixed) per month = \$667/mo USD.

Walk in Interview: 3rd August 2023

Time of reporting & document verification 0900-1100 hrs

Venue: Prithvi Bhavan, Ministry of Earth Sciences, Lodhi Road, New Delhi

Read Full Advertisement: [Bilingual Advertisement of 43 ISEA Logistics Personnel](#)

Source: <https://itshamradio.com/applications-invited-for-43rd-antartica-expedition/>

## **\*ARRL AND NASA TEAM UP TO HELP TEACHERS\***

ARRL NEWS 7/31/2023

A radio experiment held on July 26, 2023, to decode a slow-scan TV (SSTV) message sent via the ham radio station on the International Space Station (ISS) was successful.

The image was received by a group of educators at the headquarters of [ARRL The National Association for Amateur Radio®](#) in Newington, Connecticut through the voice repeater on the ISS. Teachers from around the United States were on hand for the [ARRL Teachers Institute on Wireless Technology](#), a program that empowers educators to incorporate amateur radio into their science, technology, engineering, and mathematics (STEM) curriculum. As part of the professional development program, the group received and decoded the image sent by volunteers with Amateur Radio on the International Space Station (ARISS). The transmitted image said, "ARRL Teachers Institute: ensuring a space for radio in the next generation."

The teachers thought it was cool. "Amateur radio is so important to the future of engineering and STEM in our country," said Kristen Kucko, KQ4ECP, one of the institute participants. The group gathered outside ARRL Headquarters with antennas they had made earlier in the day. As the pass happened, the educators tracked the ISS by hand. A warble of SSTV transmission filled the air, and the group was excited. After the pass, they used laptops to decode the audio stream into an image, while they sat on picnic tables and enjoyed pizza and wings.

For ARRL Education and Learning Manager Steve Goodgame, K5ATA, the experiment was a way to allow teachers to engage with the power of radio. "When teachers can pull an image off the ISS via amateur radio, it gives a sense of accomplishment that gets them excited. We want to get them fired up about radio, so they can carry that energy back to their classrooms and do the same thing with their students," said Goodgame.

Each of the teachers on hand for the second phase of the institute, -- "TI-2: Remote Sensing and Data Analysis," -- have already been through the introductory course and they are all licensed

radio amateurs. The institute costs teachers nothing to attend, thanks to funding from the [ARRL Education & Technology Program](#).

Several local television stations from the Hartford-New Haven market covered the event. See coverage from [WTNH News 8 \(ABC\)](#) and [WFSB Eyewitness News 3 \(CBS\)](#).

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### \*CLUB MEETING and ZOOM\*

The meeting time is 1100 on Saturday morning at the Lurie Civic Building on the St Petersburg College campus in Seminole. Turn west at the light at 113<sup>th</sup> St N and about 92<sup>nd</sup> 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 double parking is fine since we will be able to find the owner to move his vehicle if necessary. Alternately if you go another 100 yards past you can park in the college parking lot. Below is the Zoom information, same as last month. The ZOOM meeting is limited to 40 minutes so I will start it early and restart it to cover the whole meeting.

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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

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### \*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.

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## \*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

### 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 <sup>RD</sup> 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
0000-2359 HF Winlink	Winlink Wednesday Net <a href="https://winlinkwednesday.net/reminder.html">https://winlinkwednesday.net/reminder.html</a>	

## 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 Pinellas Co
2000 53.150 -1MHz 146.2	Wormhole	from Pinellas Co
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
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1830	147.060 no tone	St Pete ARC daily net	from St Petersburg
2030	NI4CE system	EAGLE Net, NTS traffic net	NI4CE system
<b>SUNDAY</b>			
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

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**\*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.

- \*Heathkit HD-1215 Phone patch \$15 looks ok
- \*Drake WV-5 wattmeter \$90 looks ok
- \*Heath Cantenna dummy load, 1 gal oil load, oil a little low, \$50

Dean W8IM wants to make room in his closet.

352-255-1431 or w8im @arrl.net or the Wormhole and SPARC nets

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

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## \*HAMFESTS\*

### 2023

**August 19**

**TARCFest** TARC Clubhouse, 22<sup>nd</sup> St at the river, \$5 entry including tailgate, a few inside tables reserved in advance, talkin on 147.105 +146.2, license testing after, more info at <http://hamclub.org/>

**October 21**

Bradenton, MARCIFest 2023, 2113 Morgan Johnson Road, talkin 146.820 – 100.0, for more info goto <https://www.manatee-arc.org/> contact Michael Ryan K4CVL at 941-376-6453

**December 8 & 9**

**Plant City, the 2023 Tampa Bay Hamfest and West Central Florida Section Convention**, Friday and Saturday, at the Strawberry Festival grounds, admission \$10, 16x40ft tailgate space \$10, electric \$10, for information contact Bill Williams AG4QX, [chairman@fgcarc.org](mailto:chairman@fgcarc.org) or go to <http://www.tampabayhamfest.org> or you can just ask me, Jim or Dee at a meeting ;-)

### 2024

**February 9-11**

**Orlando Hamcation**, Central Florida Fairgrounds, 4603 West Colonial Drive, Tickets \$20 in advance, \$25 after Dec 21 and at the door. Talk-in 146.760 - PL 103.5 analog or Fusion. Also D-Star is on 146.820 -, all the information at [www.hamcation.com](http://www.hamcation.com) or call 407-841-0874. There is also an AM low power Information Station on AM 610.

**May 25**

**WormFest 2024**, Pinellas Park, admission FREE, tailgate free, Freedom Lake Park, 9990 46th St N, southeast corner of US 19 and 49<sup>th</sup> 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> .



Mid January	Adventure Run, Honeymoon Island
Last full weekend January	Winter Field Day <a href="https://www.winterfieldday.com/">https://www.winterfieldday.com/</a>
Late January	Gasparilla celebration
Late February	West Central Florida Tech Conference <a href="http://arrlwcf.org/wcf-special-events/wcftechconference/">http://arrlwcf.org/wcf-special-events/wcftechconference/</a>
March	MS 150- now named the Citrus Tour bike ride <a href="http://www.citrustour.org/register.php">http://www.citrustour.org/register.php</a>
March/April	MS Walks
March/April	Mass Casualty Exercises
Late April	Southeastern VHF Society Conference, <a href="http://www.svhfs.org">http://www.svhfs.org</a>
Late April	Florida QSO Party
Mid May	March For Babies (was March of Dimes) <a href="https://www.marchforbabies.org/Registration/Events">https://www.marchforbabies.org/Registration/Events</a>
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 <a href="http://www.arrl.org/contests/announcements/fd/">http://www.arrl.org/contests/announcements/fd/</a>
July 3/4	Midnight Run in Largo <a href="http://www.kiwanismidnightrun.com/">http://www.kiwanismidnightrun.com/</a>
Third weekend in August	International Lighthouse/Lightship Week <a href="https://illw.net/">https://illw.net/</a>
September	Run for All Children's
October, 3 <sup>rd</sup> weekend	JOTA, Scout Jamboree-on-the-AIR (around 14.280MHz)
Early December	ALS bike ride in Walsingham Park
December, Second weekend	Tampa Bay Hamfest <a href="http://www.fgcarc.org/">http://www.fgcarc.org/</a>

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### **\*YOUR WORMHOLE OFFICERS\***

Bill AG4QX is President and editor of this newsletter, the Vice President position is open, Treasurer is Jim KD4MZL, Paul KA4IOX is the Secretary, Dee N4GD is the Repeater Trustee and Mike KV0OOM is our 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-2X. 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](mailto:ag4qx@arrl.net)